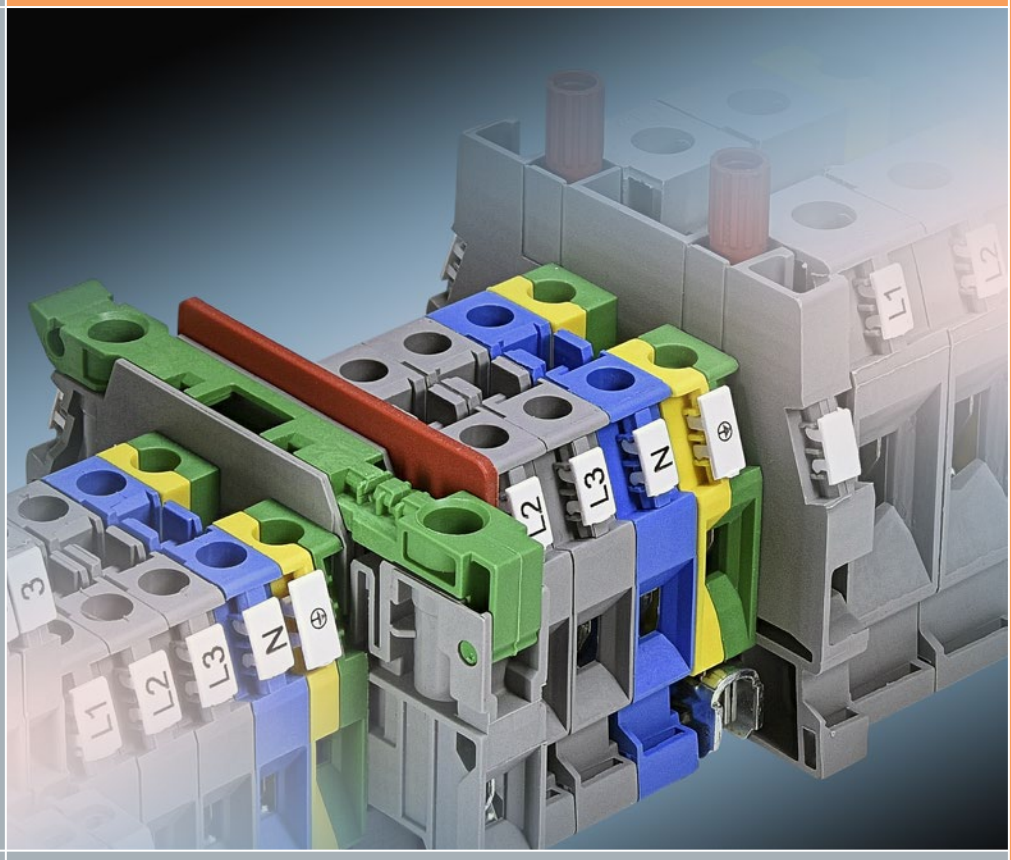
ETICONNECT

LINE-UP TERMINALS

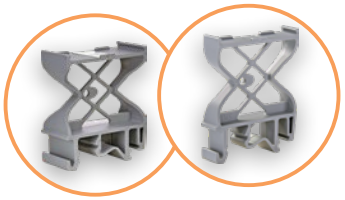


POWER NEEDS CONTROL

Screw Type terminal blocks

Protection against accidental contact: U shapped covers for cross connection ESC-PRP/7 and ESC-PRP/8

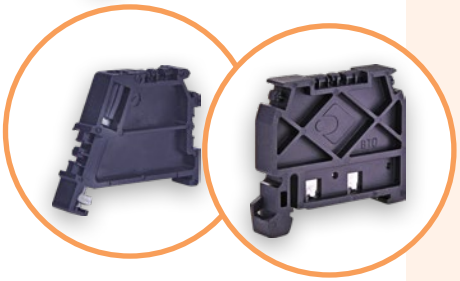
High current terminal blocks ESC-GPA, ESC-GPA / FIX and ESC-GPM / FIX are available in grey (RAL 7042) color. The FIX series is Panel-mount version



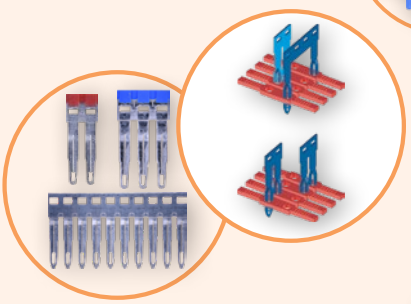
Support for markings
ES-PTM (40 x 16,5) mm
ES-PTMS (40 x 7) mm

The same marking tags for all Types of terminals with rated cross section 2,5mm²...240mm: Possibility to print labels - marking tags using SmartPrint Printer

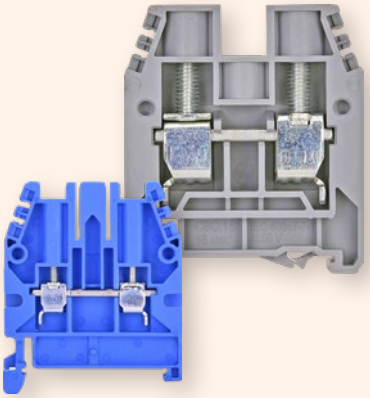
ESC-DFU partitions are used to easy locate or to increase the insulation distances between terminal blocks and parallel multiple commoning bars.



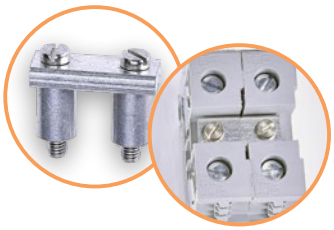
End brackets ES-BTO (spring Type), ES-BT/3 (screw Type) are used to lock terminals on TH35 rails.



"Easy bridge" system: double possibility to insert PTC, PTP multi-pole cross-connections, without the need of insulating protection. Cross connections - bridges 2, 3 and 10 pole versions with insulation red or blue, or without isolation.

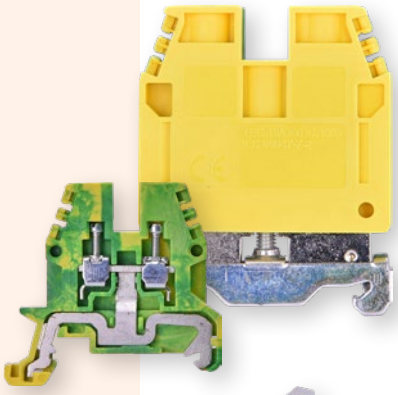


Screw Type terminal blocks ESC-CBC series for conductors with cross sections from 0,2 to 50 mm² in grey and blue color.



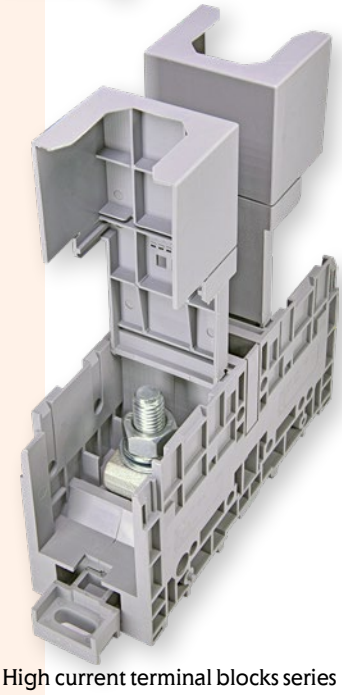
ESC-POF permanent cross connections 2 pole and Commoning bar (16 holes) for 16 mm² and 35 mm²

Earth terminal blocks series ESC-TEO and ESC-TEC for conductors with cross sections from 0,2 to 95 mm^2

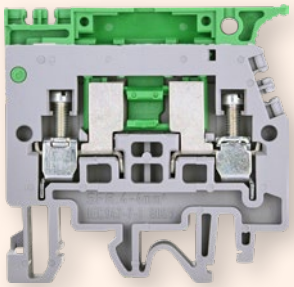


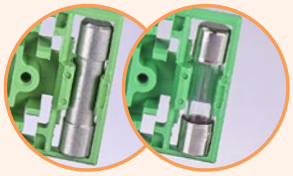
For more reliable fastening and simplified installation of several terminal blocks of the GPA series between them are provided side locks

ESC-GPA series screw terminals for connecting conductors with a cross section of 10 to 300 mm^2 are closed on both sides to prevent accidental touch to current parts. The ESC-GPA / FIX terminals are provided with installation on the mounting panel.



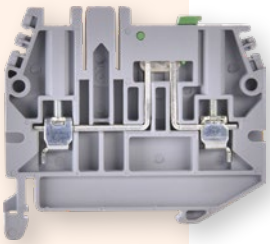
High current terminal blocks series ESC-GPM / FIX are mounted on the mounting panels. Protective covers prevent accidental touch of the conductor.

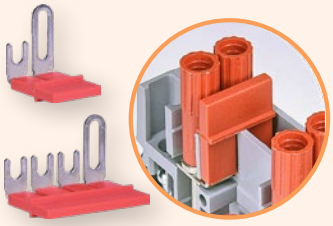




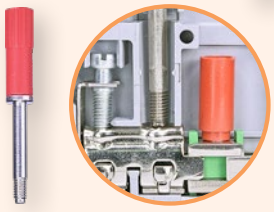
ESC-SFR series terminals for connection conductors with a cross section of 0.2 to 10 mm^2 are used for protection of circuits control using the installed in holder of a fusible insert. ESC-SFR.4 - for protection 5x20, commuting brass cylinder 5x20 or diode 5x20. ESC-SFR.6 - for 6x32 fuses

Disconnect terminal block (1-0) - Screw Type is designed to disconnect the electric circuit.

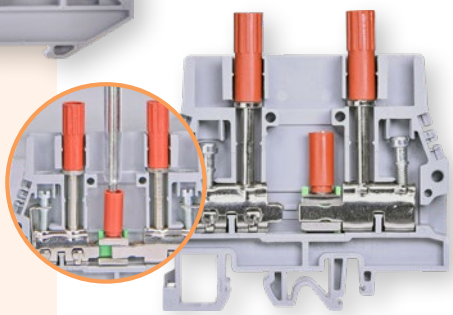




Short circuit plates ESC-SCB.6/PO are used to form special cross-connections with ESC-SCB.6 Disconnect terminal blocks used for test and measurement circuits.



For measurements and checks on circuits which are related to the terminal boards, insulated sockets ESC-PSD screwable onto the conductor body of the terminal blocks can be used.

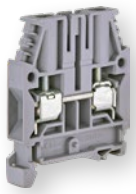
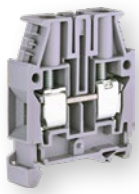
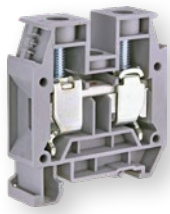


Disconnect terminals blocks for test and measurement circuits ESC-SCB series for connection conductors with a cross section of 0.2 to 10 mm2. It allows you to connect or replace measuring transformers, instruments, counters... without disconnecting the supply voltage.

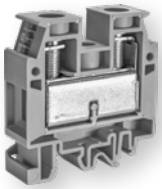
Screw terminal blocks ESC-CBC

				ESC-CBC.2			ESC-CBC.4		
									
1	Height x Width x Thickness * *The size includes the DIN rail			52 x 44 x 5 mm			52 x 44 x 6 mm		
2	Rated cross-section			**2,5 mm²**			**4 mm²**		
3	Connecting capacity	solid		0,2 - 4 mm²			0,2 - 6 mm²		
		stranded		0,2 - 4 mm²			0,2 - 6 mm²		
		with ferrule		2,5 - WP25/14			4 - WP40/16		
	Technical characteristics			IEC	UL		IEC	UL	
4	Max voltage AC/DC			**1000 V**	600 V		**1000 V**	600 V	
5	Max current with rated cross-section			**24 A**	20 A		**32 A**	30 A	
6	Max current with max cross-section			**37 A**	-		**45 A**	-	
7	Insulation stripping length / max tightening torque			9 mm / 0,8 Nm			10 mm / 1,2 Nm		
8	Rated impulse withstand voltage / pollution degree			12 kV / 3			12 kV / 3		
				Type	**Code No.**	**Packaging [pcs]**	**Type**	**Code No.**	**Packaging [pcs]**
9	Feed through terminal block (grey)			ESC-CBC.2	003903000	120	ESC-CBC.4	003903001	120
10	Feed through terminal block (blue)			ESC-CBC.2B	003903044	120	ESC-CBC.4B	003903045	120
	Accessories								
11	End section, thickness 1,5 mm (grey)			ESC-CBC.2-10/PT	003903010	50	ESC-CBC.2-10/PT	003903010	50
12	End section, thickness 1,5 mm (blue)			ESC-CBC.2-10/PTB	003903050	50	ESC-CBC.2-10/PTB	003903050	50
13	Red partition			ESC-DFU/4/R	003903013	50	ESC-DFU/4/R	003903013	50
14	Marking tag			ES-N...	page 946		ES-N...	page 946	
15	U shapped cover for cross connection protection			ESC-PRP/7	003903042	10	ESC-PRP/7	003903042	10
16	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25
17	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25
18	Red insulation partition to be used in case of cross connections - bridges			ESC-DFM/900	003903016	50	ESC-DFM/900	003903016	50
19	Cross connections - bridges (non-insulated)	2 poles		ESC-PTC/2/02	003903018	25	ESC-PTC/4/02	003903020	25
		10 poles		ESC-PTC/2/10	003903019	10	ESC-PTC/4/10	003903021	10
20	Cross connections - bridges (insulated, red)	2 poles		ESC-PTP2/02/R	003903022	25	ESC-PTP4/02/R	003903028	25
		3 poles		ESC-PTP2/03/R	003903023	25	ESC-PTP4/03/R	003903029	25
		10 poles		ESC-PTP2/10/R	003903024	25	ESC-PTP4/10/R	003903030	25
21	Cross connections - bridges (insulated, blue)	2 poles		ESC-PTP2/02/B	003903025	25	ESC-PTP4/02/B	003903031	25
		3 poles		ESC-PTP2/03/B	003903026	25	ESC-PTP4/03/B	003903032	25
		10 poles		ESC-PTP2/10/B	003903027	25	ESC-PTP4/10/B	003903033	25
22	Cross connections - bridges (non-insulated) * Recommended with (15) U shapped cover for cross connection protection	2 poles							
		multipole							

Screw Type terminal blocks

	ESC-CBC.6			ESC-CBC.10			ESC-CBC.16			ESC-CBC.35		
												
1	52 x 44 x 8 mm			52 x 44 x 10 mm			56 x 47 x 12 mm			63 x 56 x 16 mm		
2	**6 mm²**			**10 mm²**			**16 mm²**			**35 mm²**		
3	0,2 - 10 mm²			1,5 - 16 mm²			1,5 - 25 mm²			2,5 - 50 mm²		
	0,2 - 10 mm²			1,5 - 16 mm²			1,5 - 25 mm²			2,5 - 50 mm²		
	6 - WP60/20			10 - WP100/21			16 - WP160/22			35 - WP350/30		
	IEC	UL		IEC	UL		IEC	UL		IEC	UL	
4	**1000 V**	600 V		**1000 V**	600 V		**1000 V**	600 V		**1000 V**	600 V	
5	**41 A**	50 A		**57 A**	65 A		**76 A**	100 A		**101 A**	125 A	
6	**64 A**	-		**85 A**	-		**114 A**	-		**160 A**	-	
7	10 mm / 1,4 Nm			12 mm / 1,9 Nm			15 mm / 3 Nm			18 mm / 5 Nm		
8	8 kV / 3			8 kV / 3			12 kV / 3			12 kV / 3		
	Type	**Code No.**	**Packaging [pcs]**	**Type**	**Code No.**	**Packaging [pcs]**	**Type**	**Code No.**	**Packaging [pcs]**	**Type**	**Code No.**	**Packaging [pcs]**
9	ESC-CBC.6	003903002	120	ESC-CBC.10	003903003	100	ESC-CBC.16	003903004	50	ESC-CBC.35	003903005	50
10	ESC-CBC.6B	003903046	120	ESC-CBC.10B	003903047	100	ESC-CBC.16 (B)	003903048	25	ESC-CBC.35 (B)	003903049	25
	Accessories											
11	ESC-CBC.2-10/PT	003903010	50	ESC-CBC.2-10/PT	003903010	50	ESC-CBC.16/PT	003903011	25	ESC-CBC.35/PT	003903012	25
12	ESC-CBC.2-10/PTB	003903050	50	ESC-CBC.2-10/PTB	003903050	50	ESC-CBC.16/PTB	003903051	25	ESC-CBC.35/PTB	003903052	25
13	ESC-DFU/4/R	003903013	50	ESC-DFU/4/R	003903013	50	ESC-DFU/4/R	003903013	50	ESC-DFU/5/R	003903014	25
14	ES-N...	page 946		ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
15	ESC-PRP/7	003903042	10	ESC-PRP/7	003903042	10	ESC-PRP/8	003903043	10	ESC-PRP/8	003903043	10
16	ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
17	ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25
18	ESC-DFM/900	003903016	50	ESC-DFM/900	003903016	50	ESC-DFM/700	003903017	50	ESC-DFM/700	003903017	50
19	ESC-PTC/6/02	003903034	25	ESC-PTC/10/02	003903036	25						
	ESC-PTC/6/10	003903035	10	ESC-PTC/10/10	003903037	10						
20												
21												
22							ESC-POF/53	003903038	25	ESC-POF/35	003903039	15
							ESC-CPM/16 + ESC-PMP/05	003903230 003903040	25	ESC-CPM/35 + ESC-PMP/35	003903231 003903041	10

Screw terminal blocks ESC-CBD

				ESC-CBD.50			ESC-CBD.70B**		
									
1	Height x Width x Thickness * *The size includes the DIN rail			62 x 57 x 18 mm			71 x 62 x 20,5 mm		
2	Rated cross-section			**50 mm²**			**70 mm²**		
3	Connecting capacity	solid		1 - 70 mm²			1 - 95 mm²		
		stranded		1,5 - 50 mm²			1,5 - 95 mm²		
		with ferrule		50 - WP500/40			-		
	Technical characteristics			IEC	UL		IEC	UL	
4	Max voltage AC/DC			**1000 V**	600 V		**1000 V**	600 V	
5	Max current with rated cross-section			**150 A**	130 A		**192 A**	220 A	
7	Insulation stripping length / max tightening torque			22 mm / 5 Nm			26 mm / 8 Nm		
8	Rated impulse withstand voltage / pollution degree			12 kV / 3			12 kV / 3		
				Type	**Code No.**	**Packaging [pcs]**	**Type**	**Code No.**	**Packaging [pcs]**
9	Feed through terminal block (grey)			ESC-CBD.50	003903241	40	-	-	-
10	Feed through terminal block (blue)			ESC-CBD.50B	003903243	40	ESC-CBD.70B	003903245	40
	Accessories								
11	End section, thickness 1,5 mm (grey)			ESC-CBD.50/PT	003903242	10	-	-	-
12	End section, thickness 1,5 mm (blue)			ESC-CBD.50/PTB	003903244	10	ESC-CBD.70/PTB	003903246	50
13	Marking tag			ES-N...	page 946		ES-N...	page 946	
14	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25
15	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25
16	Cross connections - bridges (non-insulated) * Recommended with (15) U shapped cover for cross connection protection	2 poles		ESC-POF/07	003903326	15			

** ESC-CBD.70B available only in blue version

MAXIMUM SHORT-TIME WITHSTAND CURRENTS ALLOCATED TO THE RAIL PROFILE

Rail profile	Material	Equivalent E-cu cross-section mm²	Short-time withstand current 1 s kA	Thermal rated current of a PEN busbar A
"Top hat" rail IEC 60715/TH 15 - 5,5	Steel	10	1,2	-
	Copper	25	3	101
	Aluminium	16	1,92	76
G32-Type rail IEC 60715/G32	Steel	35	4,2	-
	Copper	120	14,4	269
	Aluminium	70	8,4	192
"Top hat" rail IEC 60715/TH 35 - 7,5	Steel	16	1,92	-
	Copper	50	6	150
	Aluminium	35	4,2	125
"Top hat" rail IEC 60715/TH 35 - 15	Steel	50	6	-
	Copper	150	18	309
	Aluminium	95	11,4	232

Taken from CEI EN 60947-7-2 standard

High current terminal blocks ESC-GPA

				ESC-GPA.70	ESC-GPA.70/FIX
					
1	Height x Width x Thickness * *The size includes the DIN rail			70 x 91 x 20,5 mm	75 x 102 (88)** x 20,5 mm
2	Rated cross-section			70 mm²	
3	Connecting capacity	solid		10 - 95 mm²	
		stranded		10 - 95 mm²	
	Technical characteristics			IEC	UL
4	Max voltage AC/DC			1000 V	600 V
5	Max current with rated cross-section			192 A	215 A
6	Insulation stripping length / max tightening torque			25 mm / 9 Nm (Allen screw, 4mm wrench)	
7	Rated impulse withstand voltage / pollution degree			12 kV / 3	
				Type	Code No.	Packaging [pcs]
8	Feed through terminal block (grey)			ESC-GPA.70	003903006	25
9	Panel - mount feed through terminal block (grey)			ESC-GPA.70/FIX	003903211	25
	Accessories					
10	Marking tag			ES-N...	page 946	
11	End bracket (spring Type)			ES-BTO	003903075	25
12	End bracket (screw Type)			ES-BT/3	003903229	25
13	Cross connections - bridges (non-insulated) * Recommended with (15) U shapped cover for cross connection protection	2 poles		ESC-POF/70	003903325	25

**Fixing distance between centers

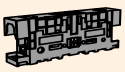
Use of terminals with aluminum conductors
Connection of aluminum conductors:
The aluminum conductor without an insulating sheath starts to oxidize, decreasing the contact quality (Aluminum oxide is not a good conductor) and, consequently, reducing its conductivity.
Steps to follow to ensure a good electrical and mechanical connection of aluminum cables with our terminal blocks:
1) Clean the stripped conductor with a wire brush to remove the oxide layer;
2) Soak the clean conductor in neutral Vaseline and connect it immediately, tightening the clamp to the prescribed torque (do not exceed the suggested tightening torque!). Should you reconnect the same cable this step must be repeated (cleaning and soaking of the conductor in Vaseline);
3) Execute the installation in a free-of-moisture environment and in a non-aggressive atmosphere;
4) Recheck the tightening after a fewdays of settling (this precaution is also suggested for copper cables);
5) If the cable section is greater than 25 mm , the use of ferrules is recommended.
From a technical standpoint the electrical conductivity of the aluminum is lower that copper one:
Electrical resistivity at 20 ° C
- Copper: 0.0178 μΩ m
- Aluminum: 0.0284 μΩ m
As a result of the different resistivity (and, therefore, of the different electrical conductivity) with the same cable section, with the same ambient temperature and allowed ΔT, under the same conditions the current flow rate in an aluminum cable will be lower than the copper cable one. So, from the point of view of the current flow, the aluminum cable cannot stress the connected clamp more than the copper cable: the heating of the clamp is a consequence of the voltage drop which is proportional to the current flow, and, as discussed above, the current flow in an aluminum cable is lower.

High current terminal blocks ESC-GPA

			ESC-GPA.95	ESC-GPA.95/FIX
				
1	Height x Width x Thickness * *The size includes the DIN rail	 	87 x 98 x 26 mm	91 x 111 (97)** x 26 mm
2	Rated cross-section		**95 mm²**	
3	Connecting capacity	solid 	10 - 120 mm²	
		stranded 	10 - 95 mm²	
	Technical characteristics		IEC	UL
4	Max voltage AC/DC		**1000 V**	600 V
5	Max current with rated cross-section		**232 A**	232 A
6	Insulation stripping length / max tightening torque		30 mm / 9 Nm (Allen screw, 4mm wrench)	
7	Rated impulse withstand voltage / pollution degree		12 kV / 3	
			Type	**Code No.**	**Packaging [pcs]**
8	Feed through terminal block (grey)		ESC-GPA.95	003903007	10
9	Panel - mount feed through terminal block (grey)		ESC-GPA.95/FIX	003903212	10
	Accessories				
10	Marking tag		ES-N...	page 946	
11	End bracket (spring Type)		ES-BTO	003903075	25
12	End bracket (screw Type)		ES-BT/3	003903229	25

**Fixing distance between centers

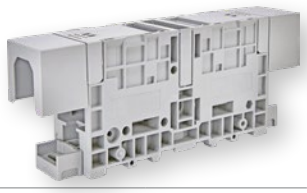
High current terminal blocks ESC-GPM

			ESC-GPM.95/FIX
			
1	Height x Width x Thickness * * The size is given taking into account the installation on the mounting panel		76 x 176 (158)** x 32 mm
2	Rated cross-section		**95**/150 **mm²**
3	Максимальна ширина наконечника, що підключається		22 mm (screw M8)
	Technical characteristics		IEC	UL
4	Max voltage AC/DC		**1000 V**	-
5	Max current with rated cross-section		**232 A**	-
6	Max current with max cross-section		**320 A**	-
7	Rated impulse withstand voltage / pollution degree		12 kV / 3	
			Type	**Code No.**	**Packaging [pcs]**
8	Feed through terminal block (grey)		ESC-GPM.95/FIX	003903215	10
	Accessories				
9	Marking tag		ES-N...	page 946	

**Fixing distance between centers

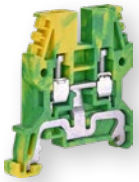
	ESC-GPA.150	ESC-GPA.150/FIX	ESC-GPA.240	ESC-GPA.240/FIX
				
1	99 x 108 x 31 mm	94 x 122 (106)** x 31 mm	120x 119 x 37 mm	115 x 134 (118)** x 37 mm
2	**150 mm²**		**240 mm²**	
3	50 - 185 mm²		50 - 300 mm²	
	50 - 150 mm²		95 - 240 mm²	
	IEC	UL	IEC	UL
4	**1000 V**	600 V	**1000 V**	600 V
5	**309 A**	309 A	**415 A**	415 A
6	35 mm / 15 Nm (Allen screw, 5 mm wrench)		40 mm / 21 Nm (Allen screw, 6 mm wrench)	
7	12 kV / 3		12 kV / 3	
	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	ESC-GPA.150	003903008	8	ESC-GPA.240	003903009	4
9	ESC-GPA.150/FIX	003903213	8	ESC-GPA.240/FIX	003903214	4
	Accessories					
10	ES-N...	page 946		ES-N...	page 946	
11	ES-BTO	003903075	25	ES-BTO	003903075	25
12	ES-BT/3	003903229	25	ES-BT/3	003903229	25

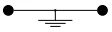
**Fixing distance between centers

	ESC-GPM.150/FIX	ESC-GPM.240/FIX
		
1	76 x 200 (158)** x 42 mm	84 x 250 (172)** x 52 mm
2	**150**/240 **mm²**	**240**/300 **mm²**
3	32 mm (screw M10)	40 mm (screw M12)
	IEC	UL	IEC	UL
4	**1000 V**	-	**1000 V**	-
5	**309 A**	-	**415 A**	-
6	**440 A**	-	**600 A**	-
7	12 kV / 3		12 kV / 3	
	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	ESC-GPM.150/FIX	003903216	6	ESC-GPM.240/FIX	003903217	4
	Accessories					
9	ES-N...	page 946		ES-N...	page 946	

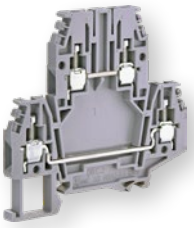
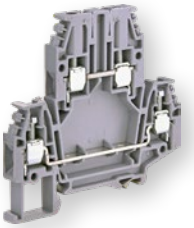
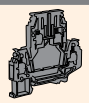
**Fixing distance between centers

Earth terminal blocks ESC-TEO

				ESC-TEO.2			ESC-TEO.4			ESC-TEC.6/0		
												
1	Height x Width x Thickness * *The size includes the DIN rail			47 x 50 x 5,5 mm			52 x 50 x 6,5 mm			52 x 44 x 8 mm		
2	Rated cross-section			**2,5 mm²**			**4 mm²**			**6 mm²**		
3	Connecting capacity	solid		0,2 - 4 mm²			0,2 - 6 mm²			0,5 - 10 mm²		
		stranded		0,2 - 4 mm²			0,2 - 6 mm²			0,5 - 10 mm²		
		with ferrule		2,5 - WP25/14			4 - WP40/16			6 - WP60/20		
	Technical characteristics			IEC	UL		IEC	UL		IEC	UL	
4	Max voltage AC/DC			-	-		-	-		-	-	
5	Max current with rated cross-section			**24 A**	-		**32 A**	-		**41 A**	-	
6	Insulation stripping length / max tightening torque			12 mm / 0,8 Nm			14 mm / 1,2 Nm			10 mm / 1,4 Nm		
7	Rated impulse withstand voltage / pollution degree			8 kV / 3			8 kV / 3			8 kV / 3		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	Earth terminal block (yellow-green)			ESC-TEO.2	003903066	75	ESC-TEO.4	003903067	50	ESC-TEC.6/0	003903070	45
	Accessories											
9	End section (green)			ESC-TEO.2/ PT	003903068	50	ESC-TEO.4/ PT	003903069	25			
10	Marking tag			ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
11	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
12	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25

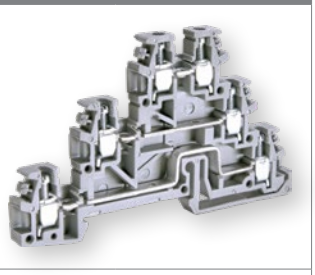
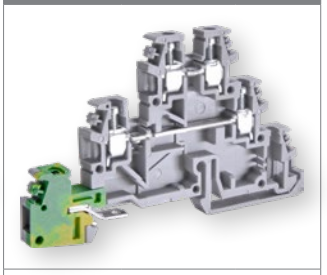
	ESC-TEC.10/0			ESC-TEC.16/0			ESC-TEC.35/0			ESC-TEC.70/0		
												
												
1	52 x 44 x 10 mm			56 x 47 x 12 mm			63 x 56 x 16 mm			81,5 x 70 x 20.5 mm		
2	**10 mm²**			**16 mm²**			**35 mm²**			**70 mm²**		
3	1,5 - 16 mm²			1,5 - 25 mm²			2,5 - 50 mm²			10 - 95 mm²		
	1,5 - 16 mm²			1,5 - 25 mm²			2,5 - 50 mm²			10 - 95 mm²		
	10 - WP100/21			16 - WP160/22			-			-		
	IEC	UL		IEC	UL		IEC	UL		IEC	UL	
4	-	-		-	-		-	-		-	-	
5	**57 A**	-		**76 A**	-		**125 A**	-		**192 A**	-	
6	12 mm / 1,9 Nm			15 mm / 1,2 Nm			18 mm / 5 Nm			25 mm / 9 Nm		
7	8 kV / 3			8 kV / 3			12 kV / 3			8 kV / 3		
	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	ESC-TEC.10/0	003903071	35	ESC-TEC.16/0	003903072	30	ESC-TEC.35/0	003903073	15	ESC-TEC.70/0	003903074	25
	Accessories											
9												
10	ES-N...	page 946		ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
11	ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
12	ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25

Two-level terminal blocks ESC-DBC

				ESC2-DBC.2			ESC2-DBC.4		
									
									
1	Height x Width x Thickness * *The size includes the DIN rail			66 x 70 x 5 mm			66 x 70 x 6 mm		
2	Rated cross-section			**2,5 mm²**			**4 mm²**		
3	Connecting capacity	solid		0,2 - 4 mm²			0,2 - 6 mm²		
		stranded		0,2 - 4 mm²			0,2 - 6 mm²		
		with ferrule		2,5 - WP25/14			4 - WP40/16		
	Technical characteristics			IEC	UL		IEC	UL	
4	Max voltage AC/DC			**630 V**	600 V		**630 V**	600 V	
5	Max current with rated cross-section			**24 A**	20 A		**32 A**	30 A	
6	Insulation stripping length / max tightening torque			9 mm / 0,8 Nm			9 mm / 1 Nm		
7	Rated impulse withstand voltage / pollution degree			8 kV / 3			8 kV / 3		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	Two-level feed through terminal block (grey)			ESC2-DBC.2	003903053	120	ESC2-DBC.4	003903054	100
	Accessories								
9	End section (grey)			ESC2-DBC.2/PT	003903055	25	ESC2-DBC.4/PT	003903056	25
10	Red partition			ESC-DFU/7/R	003903015	25	ESC-DFU/7/R	003903015	25
11	Marking tag			ES-N...	page 946		ES-N...	page 946	
12	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25
13	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25
14	Red insulation partition to be used in case of cross connections - bridges	upper level		ESC-DFM/900	003903016	50	ESC-DFM/900	003903016	50
		lower level**		ESP-DFM/500	003903144	50	ESP-DFM/500	003903144	50
15	Cross connections - bridges (non-insulated)	2 poles		ESC-PTC/2/02	003903018	25	ESC-PTC/4/02	003903020	25
		10 poles		ESC-PTC/2/10	003903019	10	ESC-PTC/4/10	003903021	10

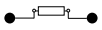
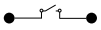
**Additional data under spring Type terminal blocks' accessories

Three-level terminal blocks

				ESC-TLD.2			ESC-TDE.2		
									
									
1	Height x Width x Thickness * *The size includes the DIN rail			52 x 85 x 6,2 mm			52 x 85 x 6,2 mm		
2	Rated cross-section			**2,5 mm²**			**2,5 mm²**		
3	Connecting capacity	solid		0,2 - 4 mm²			0,2 - 4 mm²		
		stranded		0,2 - 4 mm²			0,2 - 4 mm²		
		with ferrule		2,5 - WP25/14			2,5 - WP25/14		
	Technical characteristics			IEC	UL		IEC	UL	
4	Max voltage AC/DC			**250 V**	600 V		**250 V**	600 V	
5	Max current with rated cross-section			**24 A**	15 A		**24 A**	20 A	
6	Insulation stripping length / max tightening torque			8 mm / 0,8 Nm			8 mm / 0,8 Nm		
7	Rated impulse withstand voltage / pollution degree			4 kV / 3			4 kV / 3		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	Three-level feed through terminal block (grey)			ESC-TLD.2	003903247	125			
9	Three-level feed through terminal block (blue)			ESC-TLD.2B	003903249	125			
10	Two feed through levels + earth (grey)						ESC-TDE.2	003903250	25
	Accessories								
11	End section (grey)			ESC-TLD/PT	003903248	25	ESC-TLD/PT	003903248	25
12	Marking tag			ES-N...	page 946		ES-N...	page 946	
13	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25
14	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25
15	Cross connections - bridges (non-insulated) * Recommended with (15) U shapped cover for cross connection protection	2 poles		ESC-PM/20/2	003903327	25	ESC-PM/20/2	003903327	25
		3 poles		ESC-PM/20/3	003903328	25	ESC-PM/20/3	003903328	25
		10 poles		ESC-PM/20/10	003903329	10	ESC-PM/20/10	003903329	10

Fuse holder terminal blocks ESC-SFR

Disconnect terminal blocks ESC-CBS

				ESC-SFR.4			ESC-SFR.6			ESC-CBS.2		
												
												
1	Height x Width x Thickness * *The size includes the DIN rail			52 x 52 x 8 mm			59 x 79 x 10 mm			52 x 57 x 5 mm		
2	Rated cross-section			**4 mm²**			**6 mm²**			**2 mm²**		
3	Connecting capacity	solid		0,2 - 6 mm²			0,2 - 10 mm²			0,2 - 4 mm²		
		stranded		0,2 - 6 mm²			0,2 - 10 mm²			0,2 - 4 mm²		
		with ferrule		4 - WP40/16			6 - WP60/20			2 - WP25/14		
	Technical characteristics			IEC	UL		IEC	UL		IEC	UL	
4	Max voltage AC/DC			**800 V**	600 V		**630 V**	600 V		**630 V**	600 V	
5	Max current with rated cross-section			**6,3 A (20 A with C0/05)**	6,3 A		**10 A**	10 A		**20 A**	20 A	
6	Insulation stripping length / max tightening torque			11 mm / 1,2 Nm			11 mm / 1,4 Nm			9 mm / 0,6 Nm		
7	Rated impulse withstand voltage / pollution degree			6 kV / 3			6 kV / 3			6 kV / 3		
8	Function / Type			fuse holder for ø 5 x 20 mm fuse			fuse holder for ø 6,3 x 32 mm fuses			disconnect lever		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
9	Disconnect terminal block (grey)			ESC-SFR.4	003903057	70	ESC-SFR.6	003903061	50	ESC-CBS.2	003903064	100
	Accessories											
10	End section (grey)			ESC-SFR.4/PT	003903060	25	ESC-SFR.6/PT	003903062	25	ESC-CB/PT	003903237	25
11	Red partition						ESC-DFU/7/R	003903015	25			
12	Marking tag			ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
13	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
14	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25
15	Conducting element	brass cylinder 5x20		ESC-C0/05	003903059	50						
		diode 255/3A 5x20		ESC-SFR/3A	003903058	70						
16	LED indicator	12-48 V AC/DC		ESC-LED.12-48	003903332	10						
		115-230 V AC/DC		ESC-LED.115-230	003903333	10						
17	Red insulation partition to be used in case of cross connections - bridges									ESC-DFM/900	003903016	50
18	Cross connections - bridges (non-insulated)	2 poles								ESC-PTC/2/02	003903018	25
		10 poles								ESC-PTC/2/10	003903019	10
19	Cross connections - bridges (insulated, red)	2 poles								ESC-PTP2/02/R	003903022	25
		3 poles								ESC-PTP2/03/R	003903023	25
		10 poles								ESC-PTP2/10/R	003903024	10
20	Cross connections - bridges (insulated, blue)	2 poles								ESC-PTP2/02/B	003903025	25
		3 poles								ESC-PTP2/03/B	003903026	25
		10 poles								ESC-PTP2/10/B	003903027	10

Features
ESC-SFR Series - Fuse-holders

- with UL94V-0 polyamide insulating body
- available in grey RAL 7042 colour
- universal mounting onto rails - according to IEC 60715 Std., "G32" and "TH/35" Types
- ESC-SFR.4: for ø 5 x 20 mm fuses, with possibility to detect the fuse blow-out status, by means of a LED micro-circuit (CIL...)
- ESC-SFR.6: for ø 6.3 x 32 mm fuses, with solder lug

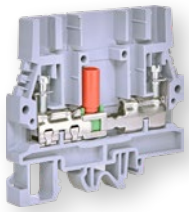
Max. dissipated power – In conf. with IEC 60947-7-3				
Terminal block	Voltage [V] (*)	Current [A]	Protection against overload and short circuit	Only protection against short circuit
			(PV) - [W]	(PV) - [W]
ESC-SFR.4	250	6,3	2,5	2,5
ESC-SFR.6	250	10	2,5	4

Disconnect terminal blocks for test and measurement circuits ESC-SCB

Disconnect terminal blocks for test and measurement circuits ESC-SCB series

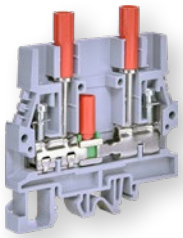
- disconnects by means of conducting element to be inserted in the lever
- slide link disconnect
- possibility to perform parallel connections
- universal mounting for both PR/DIN and PR/3 rails which meet IEC 60715 norms, "G32" and TH/35 Types
- available in grey
- maximum operating temperature 100 °C

ESC-SCB.6



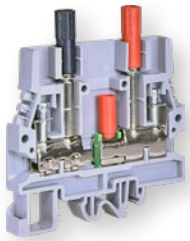
(*) For the simple connection in parallel of two or more adjoining terminal blocks use the parallel skid, with the screws and sleeves, after removing the insulating wall with a simple cutter

ESC-SCB.6/DD



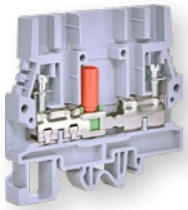
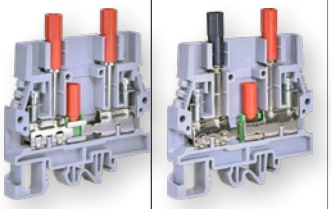
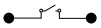
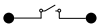
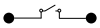
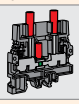
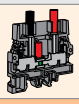
Longitudinal and transversal test switching terminal block. Configuration complete with test plug socket downstream and upstream the slide link, compliant with the ENEL LV 27/3 specifications

ESC-SCB.6/CD



Longitudinal and transversal test switching terminal block. Configuration complete with a test plug socket upstream and a short circuit sleeve ESC-SCB.6/PO-2 or ESC-SCB.6/PO-4 Type, supplied separately, downstream of the slide link, compliant with the ENEL LV 27/2 specifications

Disconnect terminal blocks for test and measurement circuits ESC-SCB

				ESC-SCB.4			ESC-SCB.6			ESC-SCB.6DD ESC-SCB.6CD		
												
												
1	Height x Width x Thickness * *The size includes the DIN rail			44 x 58 x 6,5 mm			65 x 69 x 8 mm			76 x 69 x 8 mm / 77 x 69 x 8 mm		
2	Rated cross-section			**4 mm²**			**6 mm²**			**6 mm²**		
3	Connecting capacity	solid		0,2 - 6 mm²			0,5 - 10 mm²			0,5 - 10 mm²		
		stranded		0,2 - 6 mm²			0,5 - 10 mm²			0,5 - 10 mm²		
		with ferrule		4 - WP40/16			6 - WP60/20			6 - WP60/20		
	Technical characteristics			IEC	UL		IEC	UL		IEC	UL	
4	Max voltage AC/DC			**800 V**	600 V		**800 V**	600 V		**800 V**	-	
5	Max current with rated cross-section			**32 A**	20 A		**41 A**	47 A		**41 A**	-	
6	Insulation stripping length / max tightening torque			9 mm / 1,2 Nm			12 mm / 1,4 Nm			12 mm / 1,4 Nm		
7	Rated impulse withstand voltage / pollution degree			8 kV / 3			8 kV / 3			8 kV / 3		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	disconnect by slide link (grey)			ESC-SCB.4	003903218	75	ESC-SCB.6	003903220	100			
9	disconnect by slide link in special configuration for voltmetric circuits (grey)									ESC-SCB.6/DD	003903221	80
10	disconnect by slide link in special configuration for amperometric circuits (grey)									ESC-SCB.6/CD	003903222	80
	Accessories											
11	End section (grey)			ESC-SCB.4/ PT	003903219	25	ESC-SCB.6/PT	003903223	25	ESC-SCB.6/PT	003903223	25
12	Red partition						ESC-DFU/6/R	003903224	25	ESC-DFU/6/R	003903224	25
13	PSD socket - test connector			ESP-PSD/A	003903226	50	ESC-PSD/P	003903225	50	2 pcs included (for measuring voltage or current)		
14	Short circuit plate	2 poles					ESC-SCB.6/ PO/2	003903227	40	ESC-SCB.6/PO/2	003903227	40
		4 poles					ESC-SCB.6/ PO/4	003903228	20	ESC-SCB.6/PO/4	003903228	20
15	Marking tag			ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
16	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
17	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25

Accessories for screw terminal blocks

ESC-PT end sections

For each Type and cross section of terminal block, there is a specific insulating and closing end section to be placed on the open element of each terminal board. This end section may also be used to separate different phases of adjoining terminal blocks linked by cross connections or to increase insulation distances where specific circumstances may require it. The end sections have the same overall dimension as the related terminal block, thicknesses are given in the table below.

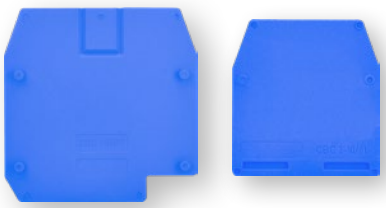
End sections, grey color

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC-CBC.2-10/PT	003903010	ESC-CBC.2...ESC-CBC.10	3	50
ESC-CBC.16/PT	003903011	ESC-CBC.16	3,8	25
ESC-CBC.35/PT	003903012	ESC-CBC.35	5,5	25
ESC-CBD.50/PT	003903242	ESC-CBD.50	6,23	10

Bigger cross sections (ESC-GPA.70...240mm²) are compact, end sections not needed

End sections, blue color

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC-CBC.2-10/PTB	003903050	ESC-CBC.2B...ESC-CBC.10B	3,1	50
ESC-CBC.16/PTB	003903051	ESC-CBC.16B	3,8	25
ESC-CBC.35/PTB	003903052	ESC-CBC.35B	5,2	25
ESC-CBD.50/PTB	003903244	ESC-CBD.50B	6,23	10
ESC-CBD.70/PTB	003903246	ESC-CBD.70B	6,8	10



End section for two and three level terminal blocks

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC2-DBC.2/PT	003903055	ESC2-DBC.2	5,2	25
ESC2-DBC.4/PT	003903056	ESC2-DBC4	5,2	25
ESC-TLD/PT	003903248	ESC-TLD, ESC-TDE	6	25

End sections for earth terminal blocks

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC-TEO.2/PT	003903068	ESC-TEO.2	2,3	50
ESC-TEO.4/PT	003903069	ESC-TEO.4	3,2	25

*Bigger cross sections (6...70mm²) are compact, end sections not needed

End sections for fuse holder terminal block, disconnect terminal block

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC-SFR.4/PT	003903060	ESC-SFR.4	3,5	25
ESC-SFR.6/PT	003903062	ESC-SFR.6	5,7	25
ESC-CB/PT	003903237	ESC-CB	3,48	25

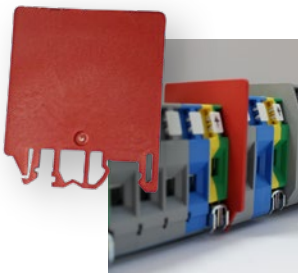
End sections for disconnect terminal blocks for test and measurement circuits

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC-SCB.4/PT	003903219	ESC-SCB.4	3,44	25
SCB/6/PT/GR	003903223	ESC-SCB.6, SCB.6/DD/GR, ESC-SCB.6/CD	8,1	25

Terminal block	End section	
	Type	Thickness [mm]
ESC-CBC.2	ESC-CBC.2-10/PT	1,5
ESC-CBC.4	ESC-CBC.2-10/PT	1,5
ESC-CBC.6	ESC-CBC.2-10/PT	1,5
ESC-CBC.10	ESC-CBC.2-10/PT	1,5
ESC-CBC.16	ESC-CBC.16/PT	1,5
ESC-CBC.35	ESC-CBC.35/PT	1,5
ESC-CBD.50	ESC-CBD.50/PT	1
ESC-CBC.2B	ESC-CBC.2-10/PTB	1,5
ESC-CBC.4B	ESC-CBC.2-10/PTB	1,5
ESC-CBC.6B	ESC-CBC.2-10/PTB	1,5
ESC-CBC.10B	ESC-CBC.2-10/PTB	1,5
ESC-CBC.16B	ESC-CBC.16/PTB	1,5
ESC-CBC.35B	ESC-CBC.35/PTB	1,5
ESC-CBD.50B	ESC-CBD.50/PTB	1
ESC-CBD.70B	ESC-CBD.70/PTB	1
ESC2-DBC.2	ESC2-DBC.2/PT	1,5
ESC2-DBC.4	ESC2-DBC.4/PT	1,5
ESC-TLD, ESC-TDE	ESC-TLD/PT	1
ESC-TE0.2	ESC-TE0.2/PT	1,5
ESC-TE0.4	ESC-TE0.4/PT	1,5
ESC-SFR.4	ESC-SFR.4/PT	1,5
ESC-SFR.6	ESC-SFR.6/PT	1,5
ESC-CBS.2	ESC-MPS.4/PT	1,5

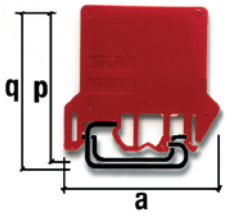
ESC-DFU partitions

In polyamide available in red, colour, 1.5 mm thick, for the separation of elements on the terminal board, in order to make certain circuits easy to locate or to increase the insulation distances between terminal blocks.
The partitions can also be used to increase the insulation distances between adjacent parallel multiple commoning bars. White and green partitions available while stocks last.



Red partitions

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC-DFU/4/R	003903013	ESC-CBC.2...ESC-CBC.16	4,9	50
ESC-DFU/5/R	003903014	ESC-CBC.35B	6,2	25
ESC-DFU/6/R	003903224	ESC-SCB.6 / DD / CD	9,04	25
ESC-DFU/7/R	003903015	ESC2-DBC.2 & ESC2-DBC4	7,4	25



NOTE:
q dimension can be obtained by adding 4 mm to dimension p

Terminal block	Partition	Dimensions a x p
ESC-CBC.2	ESC-DFU/4	52 x 62
ESC-CBC.4	ESC-DFU/4	52 x 62
ESC-CBC.6	ESC-DFU/4	52 x 62
ESC-CBC.10	ESC-DFU/4	52 x 62
ESC-CBC.16	ESC-DFU/4	52 x 62
ESC-CBC.35	ESC-DFU/5	62 x 68
ESC2-DBC.2	ESC-DFU/7	80 x 64
ESC2-DBC.4	ESC-DFU/7	80 x 64
ESC-SCB.6 / DD / CD	ESC-DFU/6/R	72 x 74

ESC-PRP protections

The cross connection, consisting of a multiple commoning bar and screws and sleeves, already placed in a recessed position with respect to the terminal board, can be further protected from accidental contact using a nylon U-shaped cover having a standard length of 10 cm. This white-coloured cover, can also be written upon, to serve as a label or reference point on the terminal board.
On the cover suitable slits are arranged to facilitate its removal by using a screwdriver.

for terminal blocks with a cross section of 4-16 mm²	ESC-PRP/7
for terminal blocks with a cross section of 25-70 mm²	ESC-PRP/8

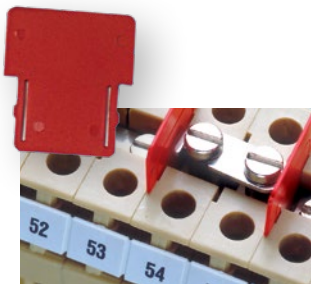

ESC-PRP/7

U shapped cover for cross connection protection

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC-PRP/7	003903042	ESC-POF & ESC-PMP, length 10 cm (for use with ESC-CBC.4...16)	2	10
ESC-PRP/8	003903043	ESC-POF & ESC-PMP, length 10 cm (for use with ESC-CBC.35...ESC-GPA.70)	2,2	10

ESC-DFM partition insulation of cross connections - bridges

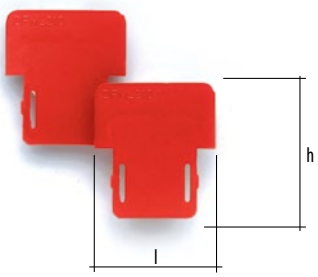
Red coloured in polyamide when it is necessary to guarantee the insulation distance between permanent or switchable cross connections, inserted between adjacent pairs of terminal blocks and, similarly, between multiple commoning bars, inserted between adjacent groups of terminal blocks.



Red insulation partition to be used in case of cross connections - bridges

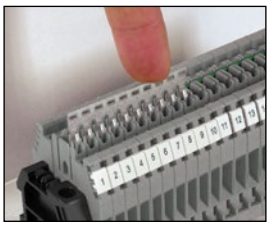
Type	Code No.	Dimension (for use with)	Weight [g]	Packaging [pcs]
ESC-DFM/900	003903016	17 x 18mm (ESC-CBC.2…ESC-CBC.10, ESC2-DBC.2M ESC2-DBC.4)	1	50
ESC-DFM/700	003903017	28 x 32mm (ESC-CBC.16, ESC-CBC.35)	0,9	50

Terminal block	Partition	Dimensions l x h [mm]	Thickness [mm]
ESC-CBC.2	ESC-DFM/900	17 x 18	0,5
ESC-CBC.4	ESC-DFM/900	17 x 18	0,5
ESC-CBC.6	ESC-DFM/900	17 x 18	0,5
ESC-CBC.10	ESC-DFM/900	17 x 18	0,5
ESC-CBC.16	ESC-DFM/700	28 x 32	0,5
ESC-CBC.35	ESC-DFM/700	28 x 32	0,5
ESC2-DBC.2	ESC-DFM/900	17 x 18	0,5
ESC2-DBC.4	ESC-DFM/900	17 x 18	0,5



Cross connections
Easy Bridge System

- screwless, snap-in insertion
- transversal and staggered mode connection possibility
- once inserted, intrinsically IPXXB protected resulting installation, without the need for further insulating covers
- patented system



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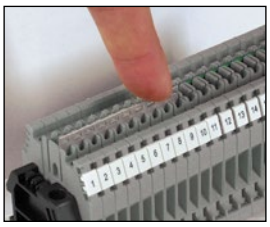

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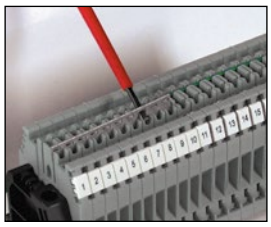


3

1-2 After having cut the bar according to the number of poles, insert the cross-connection, in the appropriate groove of the terminal block. At this point, by using the blade of a screwdriver, push down the cross-connection until it reaches its blocking point. The cross connection will be fully insulated and intrinsically IPXXB protected.

3 To remove the cross-connection, insert the blade of the screwdriver in the jumper slot, then lift it up and finally extract it.

Terminal block	2-pole jumper	10-pole jumper
ESC-CBC.2	ESC-PTC/2/02	ESC-PTC/2/10
ESC-CBC.4	ESC-PTC/4/02	ESC-PTC/4/10
ESC-CBC.6	ESC-PTC/6/02	ESC-PTC/6/10
ESC-CBC.10	ESC-PTC/10/02	ESC-PTC/10/10
ESC2-DBC.2(*)	ESC-PTC/2/02	ESC-PTC/2/10

Insulated cross connection

Nr. Poles	PTP Series - Blue	PTP Series - Red
2	ESC-PTP/2/02/B	ESC-PTP/2/02/R
3	ESC-PTP/2/03/B	ESC-PTP/2/03/R
10	ESC-PTP/2/10/B	ESC-PTP/2/10/R
2	ESC-PTP/4/02/B	ESC-PTP/4/02/R
3	ESC-PTP/4/03/B	ESC-PTP/4/03/R
10	ESC-PTP/4/10/B	ESC-PTP/4/10/R

ESC-POF permanent cross connections
Allowing the cross connection of two adjacent terminal blocks. Mounted in a suitable position in order to prevent injuries
Each ESC-POF jumper is composed by:

- 2 screws
- 2 sleeves
- 1 plate with 2 holes

All the components are in brass, with nickel plating.

Terminal block	Jumper Type	Screw	Sleeve	Plate
		M x l [mm]	Ø x l [mm]	l x s [mm]
ESC-CBC.16	ESC-POF/53	M4 x 21	8 x 15	7 x 1,5
ESC-CBC.35	ESC-POF/35	M4 x 21	8 x 15	8 x 2
ESC-GPA.70, ESC-GPA.70/FIX	ESC-POF/70	M5 x 35	8 x 23,5	10 x 3
ESC-CBD.50, ESC-CBD.50B	ESC-POF/07	M5 x 20	8 x 12	10 x 2,5
ESC-TLD.2, ESC-TDE.2	ESC-PM/20/2	pre-assembled		
	ESC-PM/30/3			
	ESC-PM/30/10			

Terminal block	Screw/sleeve	Commoning bar	Commoning bar (Length, l x s)	Number of poles
ESC-CBC.16 / B	ESC-CPM/16	ESC-PMP/05	25 cm , 7 x 1,5	21
ESC-CBC.35 / B	ESC-CPM/35	ESC-PMP/35	25 cm , 10 x 4	16

Cross connections - bridges					
Type	Code No.	CROSS CONNECTIONS: nr. of poles, for use with, color	Weight [g]	Packaging [pcs]	Min order [pcs]
ESC-PTC/2/02	003903018	2 POLE for (ESC-CBC.2, ESC2-DBC.2)	1	25	1
ESC-PTC/2/10	003903019	10 POLE for (ESC-CBC.2, ESC2-DBC.2)	5	10	
ESC-PTC/4/02	003903020	2 POLE for (ESC-CBC.4, ESC2-DBC.4)	1	25	
ESC-PTC/4/10	003903021	10 POLE for (ESC-CBC.4, ESC2-DBC.4)	6	10	
ESC-PTP2/02/R	003903022	2 POLE for (ESC-CBC.2) - RED, insulated	0,9	25	
ESC-PTP2/03/R	003903023	3 POLE for (ESC-CBC.2) - RED, insulated	1,4	25	
ESC-PTP2/10/R	003903024	10 POLE for (ESC-CBC.2) - RED, insulated	4,6	10	
ESC-PTP2/02/B	003903025	2 POLE for (ESC-CBC.2) - BLUE, insulated	0,9	25	
ESC-PTP2/03/B	003903026	3 POLE for (ESC-CBC.2) - BLUE, insulated	1,4	25	
ESC-PTP2/10/B	003903027	10 POLE for (ESC-CBC.2) - BLUE, insulated	4,6	10	
ESC-PTP4/02/R	003903028	2 POLE for (ESC-CBC.4) - RED, insulated	1	25	
ESC-PTP4/03/R	003903029	3 POLE for (ESC-CBC.4) - RED, insulated	1,3	25	
ESC-PTP4/10/R	003903030	10 POLE for (ESC-CBC.4) - RED, insulated	5,4	10	
ESC-PTP4/02/B	003903031	2 POLE for (ESC-CBC.4) - BLUE, insulated	1	25	
ESC-PTP4/03/B	003903032	3 POLE for (ESC-CBC.4) - BLUE, insulated	1,3	25	
ESC-PTP4/10/B	003903033	10 POLE for (ESC-CBC.4) - BLUE, insulated	5,4	10	
ESC-PTC/6/02	003903034	2 POLE for (ESC-CBC.6)	2	25	
ESC-PTC/6/10	003903035	10 POLE for (ESC-CBC.6)	12	10	
ESC-PTC/10/02	003903036	2 POLE for (ESC-CBC.10)	3	25	
ESC-PTC/10/10	003903037	10 POLE for (ESC-CBC.10)	18	10	
ESC-POF/53	003903038	cross connection of several terminal blocks for (ESC-CBC.16, length 2 holes)	13	25	25
ESC-POF/35	003903039	cross connection of several terminal blocks for (ESC-CBC.35, length 2 holes)	13	15	15
ESC-CPM/16	003903230	Screw/sleeve, for ESC-CBC.16 / B	5	25	25
ESC-PMP/05	003903040	Commoning bar (21 holes, length 25 cm) for ESC-CBC.16 / B	15	8	8
ESC-CPM/35	003903231	Screw/sleeve for ESC-CBC.35 / B		20	20
ESC-PMP/35	003903041	Commoning bar (16 holes, length 25 cm) for ESC-CBC.35 / B	10	8	8
ESC-POF/70	003903325	2 POLE for (ESC-GPA.70, ESC-GPA.70/FIX)	23	25	25
ESC-POF/07	003903326	2 POLE for (ESC-CBD.50, ESC-CBD.50B)	19	15	15
ESC-PM/20/2	003903327	2 POLE for (ESC-TLD.2, ESC-TDE.2)	2	25	25
ESC-PM/30/3	003903328	3 POLE for (ESC-TLD.2, ESC-TDE.2)	3	25	25
ESC-PM/30/10	003903329	10 POLE for (ESC-TLD.2, ESC-TDE.2)	9	10	10

* Connecting bridges can be cut to the desired length

** In connection with connecting bridges we recommend the use of DFM insulation partitions


ESC-PTC/2/02

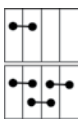

ESC-PTP2/03/B


ESC-PTP2/03/R


ESC-POF/53


ESC-PTC/6/02

PTC jumper configurations

PTC / PTP cross-connection schemes						
	SINGLE OR PARALLEL EXTENDING	POLE SKIPPING	ADJACENT WITH BARRIER	STAGGERED MODE	PARALLEL SKIPPING	
Terminal block	**Isolation voltage [V]**					**I_{max} (A)**
ESC-CBC.2	630 (400)	630 (400)	1000 (400)	500 (320)	500 (320)	24
ESC-CBC.4	630 (320)	500 (320)	800 (320)	500 (320)	500 (320)	32
ESC-CBC.6	630 (320)	630 (320)	800 (320)	630 (250)	630 (250)	41
ESC-CBC.10	800 (250)	630 (320)	800 (250)	800 (250)	630 (250)	57
ESC2-DBC.2	630	500	250* 630**	500	500	24
When connecting groups of terminals of different potential, it is necessary to install jumper separators (ESC-DFM partition insulation of cross connections) to prevent electrical breakthrough and ensure the dielectric distance between plug-in jumpers. When installing the jumpers according to the scheme, the installation of the jumper separator is **mandatory**!						

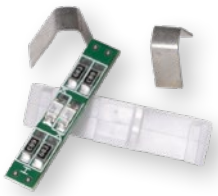
* between lower adjacent cross connections (with barrier)

** between upper adjacent cross connections (with barrier)

ESC-C0/5

Accessories for fuse holder terminal block, rated cross section 4mm²

Type	Code No.	Description	Weight [g]	Packaging [pcs]
ESC-SFR/3A	003903058	3A DIODE-HOLDER CARTRIDGE	2	70
ESC-C0/5	003903059	Brass conducting cylinder (act like disconnector)	3	50
ESC-LED.12-48	003903332	Signalling circuit	1,22	10
ESC-LED.115-230	003903333	Signalling circuit	1,22	10



Type	Rated voltage [V d.c. - V a.c.]	Current L R.M.S.
ESC-LED.12-48	12 - 48	3,0 mA
ESC-LED.115-230	115 - 230	2,3 mA

Signalling circuit

- For signalling the status of fuse holder ESC-SFR.4
- Suitable for both a.c. and d.c. circuits

Each packet is supplied with:
- two contact blades
- one non-polarized LED microcircuit
- one transparent protection

The components should be inserted inside the terminal block in the above sequence.

PSD sockets - Test conector

For measurements and checks on circuits which are related to the terminal boards, the following special items can be supplied:
- insulated sockets (PSD) screwable onto the conductor body of the terminal blocks

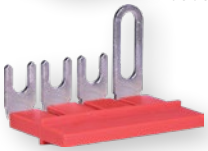
PSD sockets - Test conector, red color

Type	Code No.	Description Internal socket Ø (mm)	For use with	Weight [g]	Packaging [pcs]
ESC-PSD/P	003903225	4,05	ESC-SCB.6, ESC-SCB.6/	4	50
ESC-PSD/A	003903226	2,35	ESC-SCB.4	2	50

Short circuit plates

These allow simultaneous connection to earth of the current reducers, already connected to the ESC-SCB.4, ESC-SCB.6.
They consist of special platelets and sleeves that guarantee the correct sequence of the operation. The platelets, in the open position, block the movements of the cursors,
preventing disconnection of the current circuits.

ESC-SCB.6/P0-2



ESC-SCB.6/P0-4

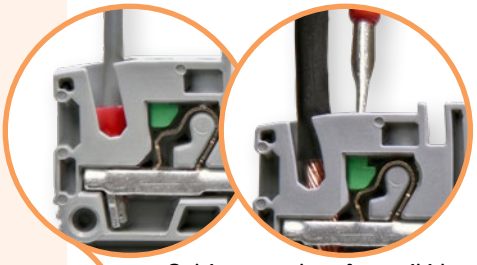
Short circuit plates

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESC-SCB.6/P0-2	003903227	Short circuit plate for two adjacent ESC-SCB.6 terminal blocks	3,15	40
ESC-SCB.6/P0-4	003903228	Short circuit plate for four adjacent ESC-SCB.6 terminal blocks	6	20

»PUSH IN« terminal blocks

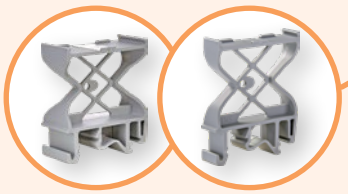
Advantages

- Up to 75% reduction in installation time compared to screw terminals;
- Increased vibration and shock resistance;
- Terminal housing is made of non-combustible polyamide V-0 (according to UL94);
- Connection of up to four conductors of cross-section from 0,5 to 4 mm^2;
- Rated voltage up to 800 V;
- Operating temperature range from -40 to +110°C;
- The "bridge" connection of the terminals is possible thanks to the "EasyBridge" system;
- Installation on TH 35 busbar according to IEC 60715;
- The design of the clamp excludes the possibility of accidental contact with live parts.



Quick connection of monolithic or flexible lug conductor with direct connection without tools

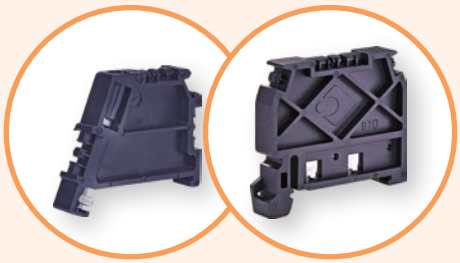
Assembly and disassembly of the flexible conductor is performed with a thin slotted screwdriver



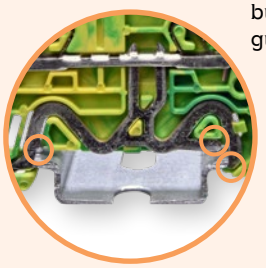
Support for markings ES-PTMS 40x7 mm and ES-PTM 40x16,5 mm

The design of the terminals allows for various marking tags. It is possible to print labels - marking tags using the SmartPrint printer

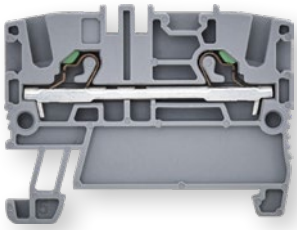
If necessary, the conductor can be easily removed from the terminal by pressing the green button with a screwdriver. This button is isolated from live parts, which is a guarantee of personnel electrical safety



End brackets are used to lock terminals on TH 35 rails



Special triple grounding contact design with DIN-rail ensures reliable mechanical and electrical connection



ESH spring clamps have an increased vibration and shock resistance. Designed for use in rail, road, marine, mining, chemical, agricultural, oil, gas, nuclear, industrial and construction industries

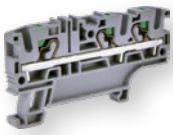
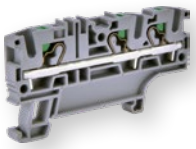
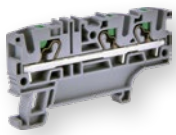
Plug-in insulated 10-pole jumpers in red or blue. Insulated jumpers provide protection against accidental contact

»PUSH IN« terminal blocks
ESH-EFC

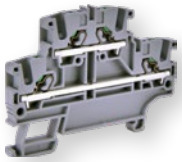
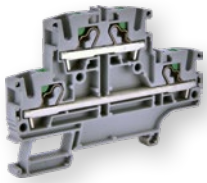
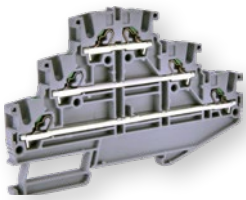
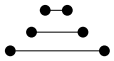
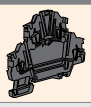
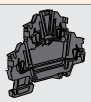
				ESH-EFC.2			ESH-EFC.4		
1	Height x Width x Thickness * *The size includes the DIN rail			39,2 x 49,6 x 5,2 mm			39,2 x 55,2 x 6,2 mm		
2	Rated cross-section			**2,5 mm²**			**4 mm²**		
3	Connecting capacity	solid		0,2 - 4 mm²			0,2 - 6 mm²		
		stranded		0,2 - 4 mm²			0,2 - 6 mm²		
		with ferrule		2,5 - WP25/19			4 - WP40/16		
	Technical characteristics			IEC	UL		IEC	UL	
4	Max voltage AC/DC			**800 V**	600 V		**800 V**	600 V	
5	Max current with rated cross-section			**24 A**	20 A		**32 A**	30 A	
6	Insulation stripping length			9 mm			10 mm		
7	Rated impulse withstand voltage / pollution degree			6 kV / 3			6 kV / 3		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	PUSH-IN spring clamp terminal block (grey)			ESH-EFC.2	003903251	160	ESH-EFC.4	003903255	120
9	PUSH-IN spring clamp terminal block (blue)			ESH-EFC.2B	003903252	160	ESH-EFC.4B	003903256	120
	Accessories								
10	End section (grey)			ESH-EFC.2/PT	003903259	25	ESH-EFC.4/PT	003903263	25
11	End section (blue)			ESH-EFC.2/PTB	003903260	25	ESH-EFC.4/PTB	003903264	25
12	Marking tag			ES-N...	page 946		ES-N...	page 946	
13	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25
14	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25
15	Cross connections - bridges (insulated, red)	10 poles		ESH-EFB.2/10/R	003903281	5	ESH-EFB.4/10/R	003903283	5
16	Cross connections - bridges (insulated, blue)	10 poles		ESH-EFB.2/10/B	003903282	5	ESH-EFB.4/10/B	003903284	5

The new products with "Push-in" connection technology offers a fast, reliable and efficient wiring of all cable Types.
REDUCTION OF INSTALLATION TIME, INCREASED PERFORMANCE
The Push-in technology allows cables and hoses to be wired with or without wire clips.
Cables are directly inserted in the terminal, with no tooling required to open the clamp spring: just pressing the wire is sufficient to provide a safe and durable electrical connection.
DIRECT PLUG-IN
Connection is so simple, precise and accurate that a switchboard can be wired with a single hand, without impacting performance. This also improves ergonomics.To connect flexible cables without a wire clip, just push the coloured button to open the spring clip and insert the properly stripped cable.
WIRE RELEASE BUTTONS: SPEED, SIMPLICITY AND SAFETY
To remove the wire from the terminal, just press the release button with any tool to open the spring. Release buttons, highlighted by different colours, prevent operators from making mistakes or coming into contact with potentially live parts, even in settings with a high concentration of links.

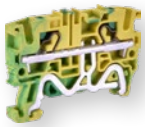
»PUSH IN« terminal blocks
ESH-EFC

			ESH-EFC.2/1+2			ESH-EFC.4/1+2			ESH-EFC.2/2+2		
											
			●——●●			●——●●			●●——●●		
1	Height x Width x Thickness * *The size includes the DIN rail	 	39,2 x 63,1 x 5,2 mm			39,2 x 71,8 x 6,2 mm			39,2 x 76,6 x 5,2 mm		
2	Rated cross-section		**2,5 mm²**			**4 mm²**			**2,5 mm²**		
3	Connecting capacity	solid 	0,2 - 4 mm²			0,2 - 6 mm²			0,2 - 4 mm²		
		stranded 	0,2 - 4 mm²			0,2 - 6 mm²			0,2 - 4 mm²		
		with ferrule 	2,5 - WP25/19			4 - WP40/16			2,5 - WP25/19		
	Technical characteristics		IEC	UL		IEC	UL		IEC	UL	
4	Max voltage AC/DC		**800 V**	600 V		**800 V**	600 V		**800 V**	600 V	
5	Max current with rated cross-section		**24 A**	20 A		**32 A**	30 A		**24 A**	20 A	
6	Insulation stripping length		9 mm			10 mm			9 mm		
7	Rated impulse withstand voltage / pollution degree		6 kV / 3			6 kV / 3			6 kV / 3		
			Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	PUSH-IN spring clamp terminal block (1 input, 2 outputs; grey)		ESH-EFC.2/1+2	003903253	120	ESH-EFC.4/1+2	003903257	110			
9	PUSH-IN spring clamp terminal block (1 input, 2 outputs; blue)		ESH-EFC.2B/1+2	003903254	120	ESH-EFC.4B/1+2	003903258	110			
10	PUSH-IN spring clamp terminal block (2 inputs, 2 outputs; grey)								ESH-EFC.2/2+2	003903285	90
11	PUSH-IN spring clamp terminal block (2 inputs, 2 outputs; blue)								ESH-EFC.2B/2+2	003903286	90
	Accessories										
12	End section (grey)		ESH-EFC.2/1+2/PT	003903261	25	ESH-EFC.4/1+2/PT	003903265	25	ESH-EFC.2/2+2/PT	003903279	25
13	End section (blue)		ESH-EFC.2/1+2/PTB	003903262	25	ESH-EFC.4/1+2/PTB	003903266	25	ESH-EFC.2/2+2/PTB	003903288	25
14	Marking tag		ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
15	End bracket (spring Type)		ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
16	End bracket (screw Type)		ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25
16	Cross connections - bridges 10 poles (insulated, red)		ESH-EFB.2/10/R	003903281	5	ESH-EFB.4/10/R	003903283	5	ESH-EFB.4/10/R	003903283	5
18	Cross connections - bridges 10 poles (insulated, blue)		ESH-EFB.2/10/B	003903282	5	ESH-EFB.4/10/B	003903284	5	ESH-EFB.4/10/B	003903284	5

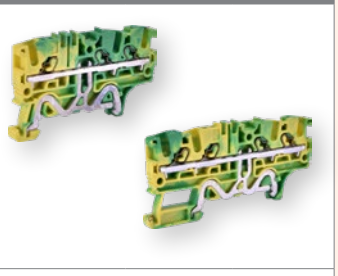
»PUSH IN« terminal blocks
two-level ESH-EFD
three-level ESH-EFT

			ESH-EFD.2	ESH-EFD.4	ESH-EFT.2
					
					
1	Height x Width x Thickness * *The size includes the DIN rail	 	53,8 x 71,6 x 5,2 mm	57,7 x 81,7 x 6,2 mm	68,4 x 106,2 x 5,2 mm mm
2	Rated cross-section		**2,5 mm²**	**4 mm²**	**2,5 mm²**
3	Connecting capacity	solid 	0,2 - 4 mm²	0,2 - 6 mm²	0,2 - 4 mm²
		stranded 	0,2 - 4 mm²	0,2 - 6 mm²	0,2 - 4 mm²
		with ferrule 	2,5 - WP25/19	4 - WP40/16	2,5 - WP25/19
	Technical characteristics		IEC / UL	IEC / UL	IEC / UL
5	Max voltage AC/DC		**800 V** / 600 V	**800 V** / 600 V	**800 V** / 600 V
6	Max current with rated cross-section		**22 A** / 20 A	**29 A** / 30 A	**22 A** / 20 A
7	Insulation stripping length		9 mm	10 mm	10 mm
8	Rated impulse withstand voltage / pollution degree		6 kV / 3	6 kV / 3	6 kV / 3
			Type / Code No. / Packaging [pcs]	Type / Code No. / Packaging [pcs]	Type / Code No. / Packaging [pcs]
9	PUSH-IN two-level spring clamp terminal block (grey)		ESH-EFD.2 / 003903267 / 130	ESH-EFD.4 / 003903268 / 100	
10	PUSH-IN three-level spring clamp terminal block (grey)				ESH-EFT.2 / 003903271 / 100
	Accessories				
11	End section (grey)		ESH-EFD.2/PT / 003903269 / 25	ESH-EFD.4/PT / 003903270 / 25	ESH-EFT.2/PT / 003903272 / 25
12	Marking tag		ES-N... / page 946	ES-N... / page 946	ES-N... / page 946
13	End bracket (spring Type)		ES-BTO / 003903075 / 25	ES-BTO / 003903075 / 25	ES-BTO / 003903075 / 25
14	End bracket (screw Type)		ES-BT/3 / 003903229 / 25	ES-BT/3 / 003903229 / 25	ES-BT/3 / 003903229 / 25
15	Cross connections - bridges (insulated, red) 10 poles		ESH-EFB.2/10/R / 003903281 / 5	ESH-EFB.4/10/R / 003903283 / 5	ESH-EFB.2/10/R / 003903281 / 5
16	Cross connections - bridges (insulated, blue) 10 poles		ESH-EFB.2/10/B / 003903282 / 5	ESH-EFB.4/10/B / 003903284 / 5	ESH-EFB.2/10/B / 003903282 / 5

»PUSH IN« earth terminal blocks ESH-EFCE

				ESH-EFCE.2			ESH-EFCE.4		
									
									
1	Height x Width x Thickness *  *The size includes the DIN rail			39,2 x 51,1 x 5,2 mm			39,2 x 55,2 x 6,2 mm		
2	Rated cross-section			2,5 mm²			4 mm²		
3	Connecting capacity	solid		0,2 - 4 mm²			0,2 - 6 mm²		
		stranded		0,2 - 4 mm²			0,2 - 6 mm²		
		with ferrule		2,5 - WP25/19			4 - WP40/16		
	Technical characteristics			IEC	UL		IEC	UL	
4	Max voltage AC/DC			-	-		-	-	
5	Max current with rated cross-section			20 A	-		26 A	-	
6	Insulation stripping length			9 mm			10 mm		
7	Rated impulse withstand voltage / pollution degree			6 kV / 3			6 kV / 3		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	PUSH-IN spring clamp terminal block (yellow-green)			ESH-EFCE.2	003903273	80	ESH-EFCE.4	003903276	70
	Accessories								
9	End section (grey)			ESH-EFC.2/PT	003903259	25	ESH-EFC.4/PT	003903263	25
10	Marking tag			ES-N...	page 946		ES-N...	page 946	
11	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25
12	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25
13	Cross connections - bridges (insulated, red)	10 poles		ESH-EFB.2/10/R	003903281	5	ESH-EFB.4/10/R	003903283	5
14	Cross connections - bridges (insulated, blue)	10 poles		ESH-EFB.2/10/B	003903282	5	ESH-EFB.4/10/B	003903284	5

»PUSH IN« earth terminal blocks ESH-EFCE

			ESH-EFCE.2/1+2 ESH-EFCE.2/2+2			ESH-EFCE.4/1+2 ESH-EFCE.4/2+2		
								
1	Height x Width x Thickness * *The size includes the DIN rail		39,2 x 64,6 (78,1*) x 5,2 mm			39,2 x 71,8 (88,4*) x 6,2 mm		
2	Rated cross-section		**2,5 mm²**			**4 mm²**		
3	Connecting capacity	solid	0,2 - 4 mm²			0,2 - 6 mm²		
		stranded	0,2 - 4 mm²			0,2 - 6 mm²		
		with ferrule	2,5 - WP25/19			4 - WP40/16		
	Technical characteristics		IEC	UL		IEC	UL	
4	Max voltage AC/DC		-	-		-	-	
5	Max current with rated cross-section		**20 A**	-		**26 A**	-	
6	Insulation stripping length		9 mm			10 mm		
7	Rated impulse withstand voltage / pollution degree		6 kV / 3			6 kV / 3		
			Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	PUSH-IN spring clamp terminal block (1 input, 2 outputs; yellow-green)		ESH-EFCE.2/1+2	003903274	50	ESH-EFCE.4/1+2	003903277	60
9	PUSH-IN spring clamp terminal block (2 inputs, 2 outputs; yellow-green)		ESH-EFCE.2/2+2	003903275	60	ESH-EFCE.4/2+2	003903278	90
	Accessories							
10	End section (grey) for ESH-EFCE.2/1+2, ESH-EFCE.4/1+2		ESH-EFC.2/1+2/PT	003903261	25	ESH-EFC.4/1+2/PT	003903265	25
11	End section (grey) for ESH-EFCE.2/2+2, ESH-EFCE.4/2+2		ESH-EFC.2/2+2/PT	003903279	25	ESH-EFC.4/2+2/PT	003903280	25
12	Marking tag		ES-N...	page 946		ES-N...	page 946	
13	End bracket (spring Type)		ES-BTO	003903075	25	ES-BTO	003903075	25
14	End bracket (screw Type)		ES-BT/3	003903229	25	ES-BT/3	003903229	25
15	Cross connections - bridges (insulated, red)	10 poles	ESH-EFB.2/10/R	003903281	5	ESH-EFB.4/10/R	003903283	5
16	Cross connections - bridges (insulated, blue)	10 poles	ESH-EFB.2/10/B	003903282	5	ESH-EFB.4/10/B	003903284	5

* Length of ESH-EFCE.2(4)/2+2 terminal blocks

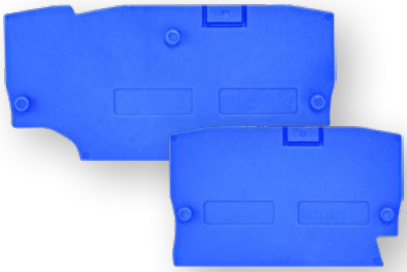
Accessories for »PUSH IN« terminal blocks

End sections, grey color

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESH-EFC.2/PT	003903259	ESH-EFC.2, ESH-EFCE.2	3,11	25
ESH-EFC.2/1+2/PT	003903261	ESH-EFC.2/1+2, ESH-EFCE.2/1+2	3,00	25
ESH-EFC.2/2+2/PT	003903279	ESH-EFC.2/2+2, ESH-EFCE.2/2+2	3,91	25
ESH-EFC.4/PT	003903263	ESH-EFC.4, ESH-EFCE.4	2,99	25
ESH-EFD.4/1+2/PT	003903265	ESH-EFC.4/1+2, ESH-EFCE.4/1+2	3,00	25
ESH-EFC.4/2+2/PT	003903280	ESH-EFCE.4/2+2	4,00	25

End sections, blue color

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESH-EFC.2/PTB	003903260	ESH-EFC.2B	2,60	25
ESH-EFC.2/1+2/PTB	003903262	ESH-EFC.2B/1+2	3,00	25
ESH-EFC.2/2+2/PTB	003903288	ESH-EFC.2B/2+2	4,06	25
ESH-EFC.4/PTB	003903264	ESH-EFC.4B	2,99	25
ESH-EFD.4/1+2/PTB	003903266	ESH-EFC.4B/1+2	3,00	25



End section for two and three level terminal blocks

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESH-EFD.2/PT	003903269	ESH.EFD.2	4,51	25
ESH-EFD.4/PT	003903270	ESH-EFT.4	5,35	25
ESH-EFT.2/PT	003903272	ESH-EFT.2	8,10	25

"Easy bridge" system: double possibility to insert ESH-EFB.2/10/R, ESH-EFB.2/10/B and ESH-EFB.4/10/R, ESH-EFB.4/10/B multi-pole cross-connections, without the need of insulating protection. Cross connections - bridges 10 pole versions with insulation red or blue, or without isolation.

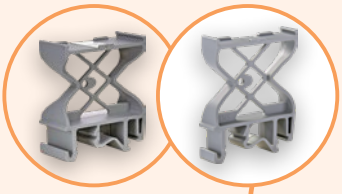
Cross connections - bridges

Type	Code No.	CROSS CONNECTIONS: nr. of poles, for use with, color	Weight [g]	Packaging [pcs]
ESH-EFB.2/10/R	003903281	10 POLE for (ESH-EFC.2, ESH-EFCE.2, ESH-EFD.2, ESH-EFT.2) - RED, insulated	5	5
ESH-EFB.2/10/B	003903282	10 POLE for (ESH-EFC.2, ESH-EFCE.2, ESH-EFD.2, ESH-EFT.2) - BLUE, insulated	5	5
ESH-EFB.4/10/R	003903283	10 POLE for (ESH-EFC.4, ESH-EFCE.4, ESH-EFD., ESH-EFT.4) - RED, insulated	5	5
ESH-EFB.4/10/B	003903284	10 POLE for (ESH-EFC.4, ESH-EFCE.4, ESH-EFD., ESH-EFT.4) - BLUE, insulated	5	5

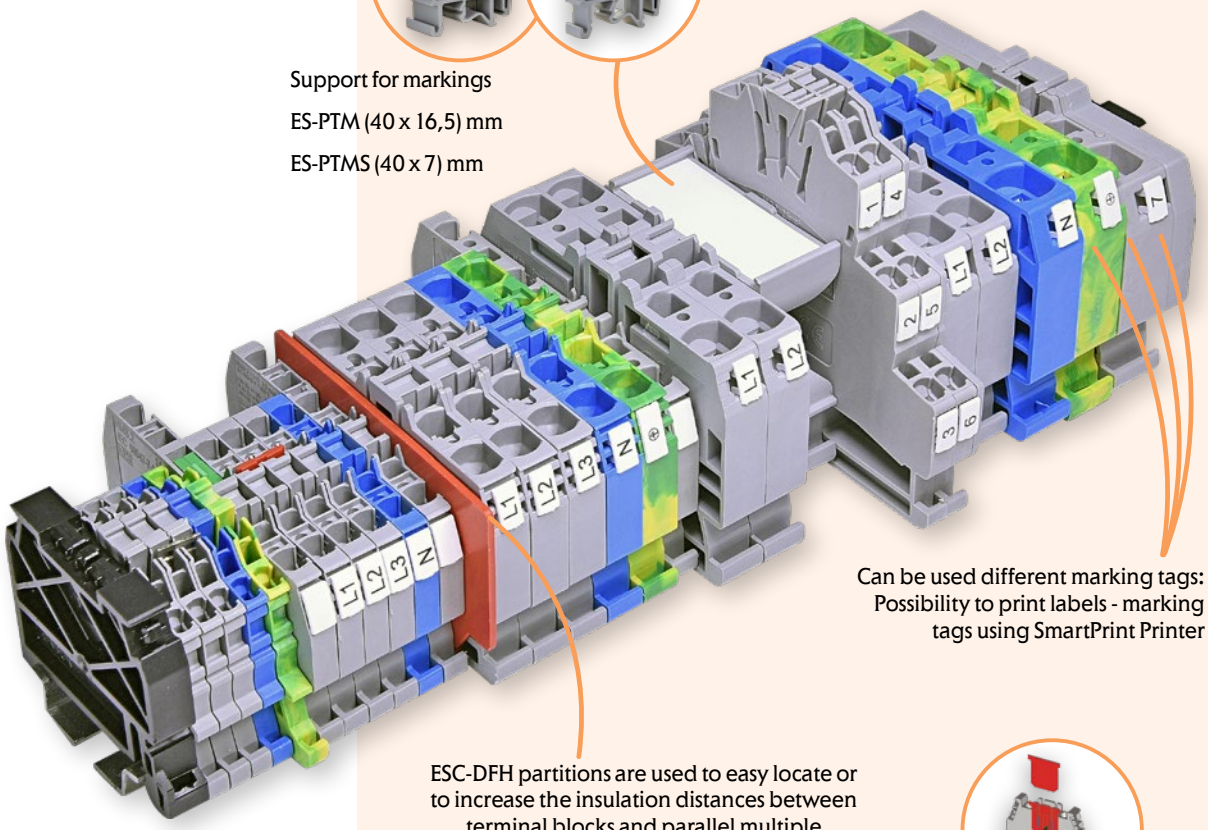
* Connecting bridges can be cut to the desired length

** In connection with connecting bridges we recommend the use of DFM insulation partitions

Spring clamp terminal blocks

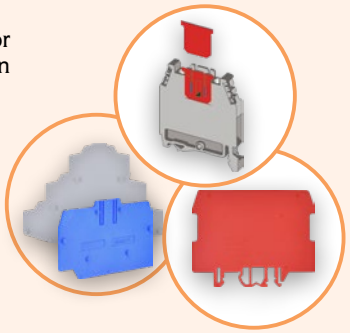


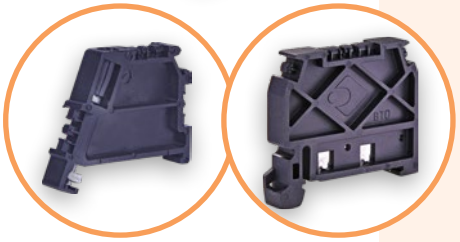
Support for markings
ES-PTM (40 x 16,5) mm
ES-PTMS (40 x 7) mm



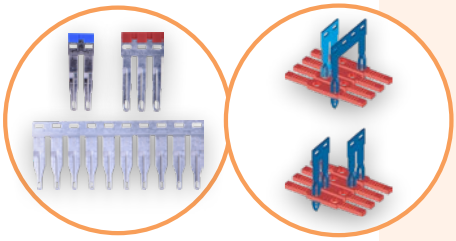
Can be used different marking tags: Possibility to print labels - marking tags using SmartPrint Printer

ESC-DFH partitions are used to easy locate or to increase the insulation distances between terminal blocks and parallel multiple commoning bars.

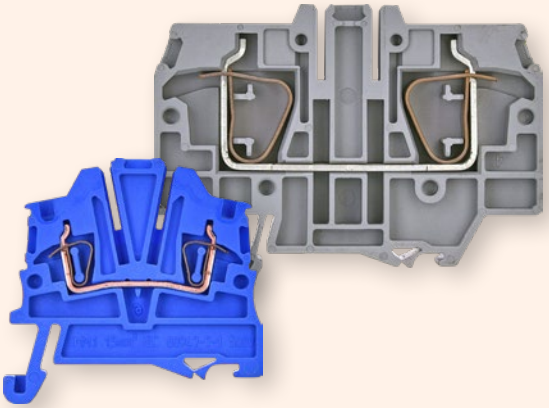




End brackets ES-BTO (spring Type), ES-BT/3 (screw Type) are used to lock terminals on TH35 rails.

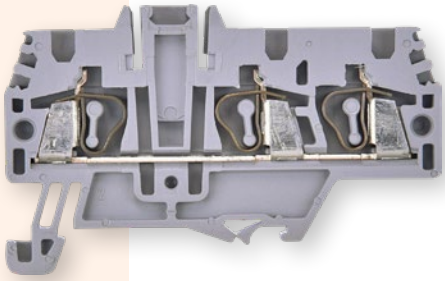


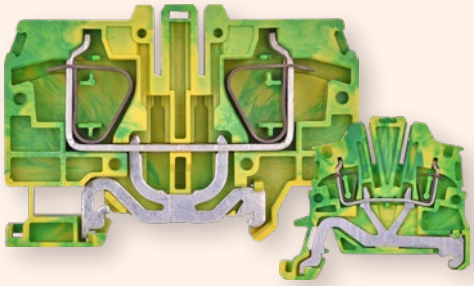
"Easy bridge" system: double possibility to insert PTC, PTP multi-pole cross-connections, without the need of insulating protection. Cross connections - bridges 2, 3 and 10 pole versions with insulation red or blue, or without isolation.



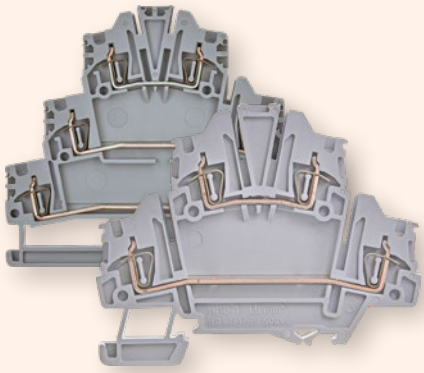
- Spring Type terminal blocks ESP-HMM series for conductors with cross sections from 0,2 to 25 mm^2 in grey and blue color. Provide constant and permanent clamping pressure to electrical conductor, resistant to vibrations.

Feed through terminal blocks ESP-HMM/1+2, 1 input and 2 outputs, grey color. For conductors with cross sections from 0,2 to 4 mm^2.

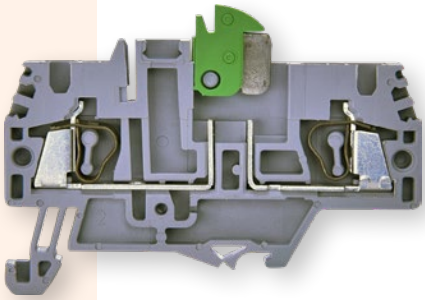




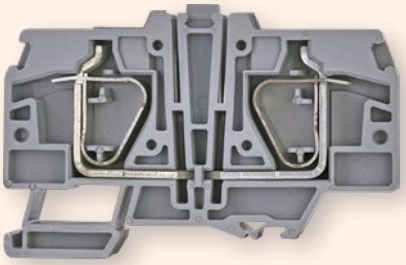
Earth terminal blocks ESP-HTE - Feed through terminal blocks, yellow-green. For conductors with cross sections from 0,2 to 25 mm^2.

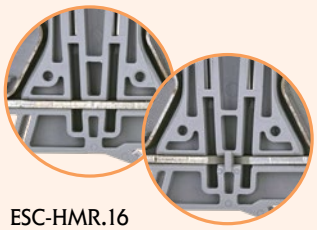


Two and three level terminal blocks ESP2-HMD and ESP3-HLD. For conductors with cross sections from 0,2 to 2,5 mm^2 in grey color.



Disconnect terminal block ESP-HMS.2. For conductors with cross sections from 0,2 to 4 mm^2 in grey color.

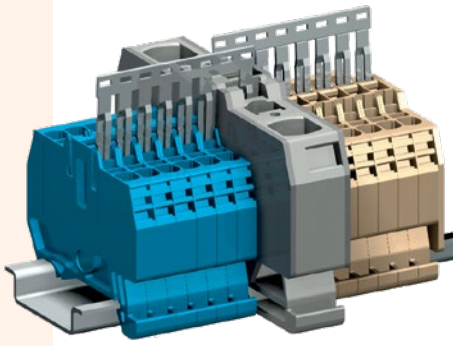




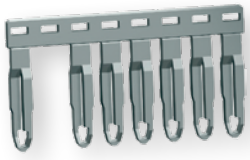
ESC-HMR.16

ESC-HMR.16/D

Potential power distribution, grey color terminal blocks ESP-HMR.16 and ESP-HMR.16/D. For conductors with cross sections from 1,5 to 25 mm^2. We have single and double power supply version.



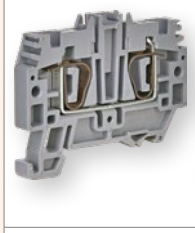
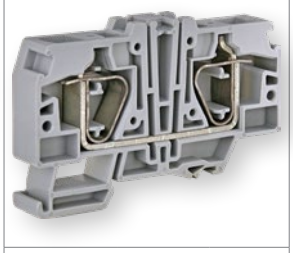
Example: double power supply version



You have to remove second pole from Cross connections - bridges in order to use it with ESC-HMR, ESC-HMR/D.

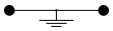
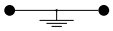
Spring clamp terminal blocks
ESP-HMM

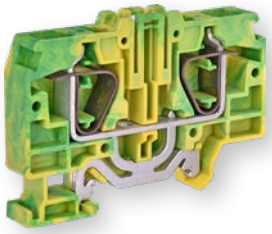
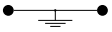
				ESP-HMM.1			ESP-HMM.2		ESP-HMM.2/1+2	
										
1	Height x Width x Thickness * *The size includes the DIN rail			43 x 45 x 4,2 mm			41 x 50 x 5,2 mm		41 x 66 x 5,2 mm	
2	Rated cross-section			**1,5 mm²**			**2,5 mm²**			
3	Connecting capacity	solid		0,2 - 2,5 mm²			0,2 - 4 mm²			
		stranded		0,2 - 2,5 mm²			0,2 - 4 mm²			
		with ferrule		1,5 - WP15/14			2,5 - WP25/14			
	Technical characteristics			IEC	UL		IEC	UL		
4	Max voltage AC/DC			**500 V**	600 V		**800 V**	600 V		
5	Max current with rated cross-section			**17,5 A**	15 A		**24 A**	20 A		
6	Insulation stripping length			10 mm			10 mm			
7	Rated impulse withstand voltage / pollution degree			8 kV / 3			8 kV / 3			
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	
8	Feed through spring clamp terminal block (grey)			ESP-HMM.1	003903130	100	ESP-HMM.2	003903131	80	
9	Feed through spring clamp terminal block (blue)			ESP-HMM.1B	003903166	100	ESP-HMM.2B	003903167	100	
10	Feed through spring clamp terminal block (1 input, 2 outputs; grey)						ESP-HMM.2/1+2	003903233	100	
	Accessories									
11	End section (grey)			ESP-HMT.1/PT	003903136	25	ESP-HMT.2/PT	003903137	25	
12	End section (blue)			ESP-HMT.1/PTB	003903172	25	ESP-HMT.2/PTB	003903173	25	
13	End section (1 input, 2 outputs; grey)						ESP-HMT.2/1+2/PT	003903189	25	
14	Red partition			ESP-DFH/1	003903142	25	ESP-DFH/1 (for ESP-HMM.2)	003903142	25	
15	Marking tag			ESP-SH004S	page 947		ES-N...	page 946		
16	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25	
17	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25	
18	Red insulation partition to be used in case of cross connections - bridges			ESP-DFM/500	003903144	50				
19	Cross connections - bridges (uninsulated)	2 poles		ESP-PTC/1/02	003903145	25				
		3 poles		ESP-PTC/1/03	003903146	25				
		10 poles		ESP-PTC/1/10	003903147	10				
20	Cross connections - bridges (insulated, red)	2 poles					ESP-PTP/3/02/R	003903148	25	
		3 poles					ESP-PTP/3/03/R	003903149	25	
		10 poles					ESP-PTP/3/10/R	003903150	10	
21	Cross connections - bridges (insulated, blue)	2 poles					ESP-PTP/3/02/B	003903151	25	
		3 poles					ESP-PTP/3/03/B	003903152	25	
		10 poles					ESP-PTP/3/10/B	003903153	10	

	ESP-HMM.4	ESP-HMM.4/1+2	ESP-HMM.6	ESP-HMM.10	ESP-HMM.16
					
					
1	45 x 58 x 6,2 mm	45 x 78 x 6,2 mm	44 x 62 x 8,2 mm	53 x 71 x 10 mm	56 x 80 x 12 mm
2	**4 mm²**		**6 mm²**	**10 mm²**	**16 mm²**
3	0,2 - 6 mm²		0,2 - 10 mm²	1,5 - 16 mm²	1,5 - 25 mm²
	0,2 - 6 mm²		0,2 - 10 mm²	1,5 - 16 mm²	1,5 - 25 mm²
	4 - WP40/16		6 - WP60/20	10 - WP100/21	16 - WP160/22
	IEC	UL	IEC	UL	IEC	UL	IEC	UL
4	**800 V**	600 V	**800 V**	600 V	**1000 V**	600 V	**1000 V**	600 V
5	**32 A**	30	**41 A**	41 A	**57 A**	57 A	**76 A**	85 A
6	12 mm		13 mm		18 mm		18 mm	
7	8 kV / 3		8 kV / 3		12 kV / 3		12 kV / 3	

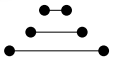
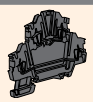
	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	ESP-HMM.4	003903132	60	ESP-HMM.6	003903133	30	ESP-HMM.10	003903134	30	ESP-HMM.16	003903135	30
9	ESP-HMM.4B	003903168	60	ESP-HMM.6B	003903169	30	ESP-HMM.10B	003903170	30	ESP-HMM.16B	003903171	30
10	ESP-HMM.4/1+2	003903234	60									
	Accessories											
11	ESP-HMT.4/PT	003903138	25	ESP-HMT.6/PT	003903139	25	ESP-HMT.10/PT	003903140	25	ESP-HMT.16/PT	003903141	25
12	ESP-HMT.4/PTB	003903174	25	ESP-HMT.6/PTB	003903175	25	ESP-HMT.10/PTB	003903176	25	ESP-HMT.16/PTB	003903177	25
13	ESP-HMT.4/1+2/PT	003903236	25									
14	ESP-DFH/1 (for ESP-HMM.4)	003903142	25	ESP-DFH/1	003903142	25	ESP-DFH/4	003903143	25	ESP-DFH/4	003903143	25
15	ES-N...	page 946		ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
16	ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
17	ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25
18												
19				ESC-PTC/8/02	003903160	25	ESC-PTC/11/02	003903162	25	ESC-PTC/16/02	003903164	25
				ESC-PTC/8/10	003903161	10	ESC-PTC/11/10	003903163	10	ESC-PTC/16/10	003903165	10
20	ESP-PTP/5/02/R	003903154	25									
	ESP-PTP/5/03/R	003903155	25									
	ESP-PTP/5/10/R	003903156	10									
21	ESP-PTP/5/02/B	003903157	25									
	ESP-PTP/5/03/B	003903158	25									
	ESP-PTP/5/10/B	003903159	10									

Earth spring clamp terminal blocks ESP-HTE

				ESP-HTE.1			ESP-HTE.2		
									
									
1	Height x Width x Thickness * *The size includes the DIN rail			43 x 50 x 4,2 mm			41 x 54 x 5,2 mm		
2	Rated cross-section			**1,5 mm²**			**2,5 mm²**		
3	Connecting capacity	solid		0,2 - 2,5 mm²			0,2 - 4 mm²		
		stranded		0,2 - 2,5 mm²			0,2 - 4 mm²		
		with ferrule		1,5 - WP15/14			2,5 - WP25/14		
	Technical characteristics			IEC	UL		IEC	UL	
4	Max voltage AC/DC			-	400 V		-	500 V	
5	Max current with rated cross-section			**17,5 A**	-		**24 A**	-	
6	Insulation stripping length			10 mm			10 mm		
7	Rated impulse withstand voltage / pollution degree			8 kV / 3			8 kV / 3		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	Feed through spring clamp terminal block (yellow-green)			ESP-HTE.1	003903190	100	ESP-HTE.2	003903191	80
	Accessories								
9	End section (grey)			ESP-HMT.1/PT	003903136	25	ESP-HMT.2/PT	003903137	25
10	Red partition			ESP-DFH/1	003903142	25	ESP-DFH/1	003903142	25
11	Marking tag			ESP-SH004S	page 947		ES-N...	page 946	
12	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25
13	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25
14	Cross connections - bridges (uninsulated)	2 poles		ESP-PTC/1/02	003903145	25			
		3 poles		ESP-PTC/1/03	003903146	25			
		10 poles		ESP-PTC/1/10	003903147	10			
15	Cross connections - bridges (insulated, red)	2 poles					ESP-PTP/3/02/R	003903148	25
		3 poles					ESP-PTP/3/03/R	003903149	25
		10 poles					ESP-PTP/3/10/R	003903150	10
16	Cross connections - bridges (insulated, blue)	2 poles					ESP-PTP/3/02/B	003903151	25
		3 poles					ESP-PTP/3/03/B	003903152	25
		10 poles					ESP-PTP/3/10/B	003903153	10

	ESP-HTE.4			ESP-HTE.6			ESP-HTE.10			ESP-HTE.16		
												
												
1	45 x 58 x 6,2 mm			44 x 62 x 8,2 mm			53 x 71 x 10 mm			56 x 80 x 12 mm		
2	**4 mm²**			**6 mm²**			**10 mm²**			**16 mm²**		
3	0,2 - 6 mm²			0,2 - 10 mm²			1,5 - 16 mm²			1,5 - 25 mm²		
	0,2 - 6 mm²			0,2 - 10 mm²			1,5 - 16 mm²			1,5 - 25 mm²		
	4 - WP40/16			6 - WP60/20			10 - WP100/21			16 - WP160/22		
	IEC	UL		IEC	UL		IEC	UL		IEC	UL	
4	-	500 V		-	500 V		-	500 V		-	630 V	
5	**32 A**	-		**41 A**	-		**57 A**	-		**76 A**	-	
6	12 mm			13 mm			18 mm			18 mm		
7	8 kV / 3			8 kV / 3			12 kV / 3			12 kV / 3		
	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
8	ESP-HTE.4	003903192	60	ESP-HTE.6	003903193	30	ESP-HTE.10	003903194	30	ESP-HTE.16	003903195	30
	Accessories											
9	ESP-HMT.4/PT	003903138	25	ESP-HMT.6/PT	003903139	25	ESP-HMT.10/PT	003903140	25	ESP-HMT.16/PT	003903141	25
10	ESP-DFH/1	003903142	25	ESP-DFH/1	003903142	25	ESP-DFH/4	003903143	25	ESP-DFH/4	003903143	25
11	ES-N...	page 946		ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
12	ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
13	ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25
14				ESC-PTC/8/02	003903160	25	ESC-PTC/11/02	003903162	25	ESC-PTC/16/02	003903164	25
				ESC-PTC/8/10	003903161	10	ESC-PTC/11/10	003903163	10	ESC-PTC/16/10	003903165	10
15	ESP-PTP/5/02/R	003903154	25									
	ESP-PTP/5/03/R	003903155	25									
	ESP-PTP/5/10/R	003903156	10									
16	ESP-PTP/5/02/B	003903157	25									
	ESP-PTP/5/03/B	003903158	25									
	ESP-PTP/5/10/B	003903159	10									

Spring clamp terminal blocks two-level ESP2-HMD, three-level ESP3-HLD

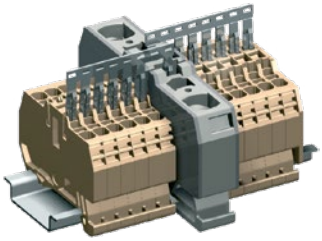
			ESP2-HMD.1			ESP2-HMD.2N			ESP3-HLD.2		
											
											
1	Height x Width x Thickness * *The size includes the DIN rail	 	59 x 73 x 4,2 mm			59 x 73 x 5,2 mm			75 x 95 x 5,2 mm		
2	Rated cross-section		**1,5 mm²**			**2,5 mm²**			**2,5 mm²**		
3	Connecting capacity	solid 	0,2 - 2,5 mm²			0,2 - 2,5 mm²			0,2 - 2,5 mm²		
		stranded 	0,2 - 2,5 mm²			0,2 - 2,5 mm²			0,2 - 2,5 mm²		
		with ferrule 	1,5 - WP15/14			1,5 - WP15/14			1,5 - WP15/14		
	Technical characteristics		IEC	UL		IEC	UL		IEC	UL	
5	Max voltage AC/DC		**500 V**	600 V		**630 V**	600 V		**500 V**	-	
6	Max current with rated cross-section		**17,5 A**	15 A		**24 A**	15 A		**24 A**	-	
7	Insulation stripping length		10 mm			10 mm			10 mm		
8	Rated impulse withstand voltage / pollution degree		6 kV / 3			8 kV / 3			8 kV / 3		
			Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
9	Two level feed through spring clamp terminal block (grey)		ESP2-HMD.1	003903183	50	ESP2-HMD.2N	003903184	40			
	Three level feed through spring clamp terminal block (grey)								ESP3-HLD.2	003903186	50
	Accessories										
10	End section (grey)		ESP2-HMD.1/PT	003903185	25	ESP2-HMD.1/PT	003903185	25	ESP3-HLD.2/PT	003903187	25
11	Red partition		ESC-DFU/7/R	003903015	25	ESC-DFU/7/R	003903015	25			
12	Marking tag		ESP-SH004S	page 947		ES-N...	page 946		ES-N...	page 946	
13	End bracket (spring Type)		ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
14	End bracket (screw Type)		ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25
15	Red insulation partition to be used in case of cross connections - bridges		ESP-DFM/500	003903144	50	ESP-DFM/500	003903144	50	ESP-DFM/500	003903144	50
16	Cross connections - bridges (non-insulated)	2 poles 	ESP-PTC/1/02	003903145	25						
		3 poles	ESP-PTC/1/03	003903146	25						
		10 poles	ESP-PTC/1/10	003903147	10						
17	Cross connections - bridges (insulated, red)	2 poles 				ESP-PTP/3/02/R	003903148	25	ESP-PTP/3/02/R	003903148	25
		3 poles				ESP-PTP/3/03/R	003903149	25	ESP-PTP/3/03/R	003903149	25
		10 poles				ESP-PTP/3/10/R	003903150	10	ESP-PTP/3/10/R	003903150	10
18	Cross connections - bridges (insulated, blue)	2 poles 				ESP-PTP/3/02/B	003903151	25	ESP-PTP/3/02/B	003903151	25
		3 poles				ESP-PTP/3/03/B	003903152	25	ESP-PTP/3/03/B	003903152	25
		10 poles				ESP-PTP/3/10/B	003903153	10	ESP-PTP/3/10/B	003903153	10

Potential power distribution spring clamp terminal blocks ESP-HMR
Disconnect spring clamp terminal blocks ESP-HMS

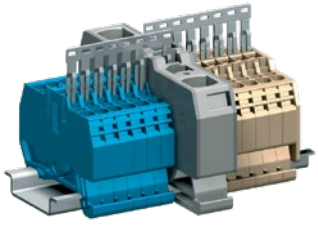
				ESP-HMR.16			ESP-HMR.16/D			ESP-HMS.2		
1	Height x Width x Thickness * *The size includes the DIN rail			50 x 80 x 12,8 mm			50 x 80 x 12,8 mm			37 x 66 x 5,2 mm		
2	Rated cross-section			**16 mm²**			**16 mm²**			**2,5 mm²**		
3	Connecting capacity	solid		1,5 - 25 mm²			1,5 - 25 mm²			0,2 - 4 mm²		
		stranded		1,5 - 25 mm²			1,5 - 25 mm²			0,2 - 4 mm²		
		with ferrule		16 - WP160/22			16 - WP160/22			2,5 - WP25/14		
	Technical characteristics			IEC	UL		IEC	UL		IEC	UL	
5	Max voltage AC/DC			**800 V**	600 V		**800 V**	600 V		**400 V**	600 V	
6	Max current with rated cross-section			**76 A**	30 A		**76 A**	30 A		**16 A**	24A	
7	Insulation stripping length			18 mm			18 mm			10 mm		
8	Rated impulse withstand voltage / pollution degree			12 kV / 3			12 kV / 3			6 kV / 3		
				Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]	Type	Code No.	Packaging [pcs]
9	Potential power distribution spring clamp terminal block (grey) / Disconnect spring clamp terminal block (grey)			ESP-HMR.16 Single power supply version	003903178	15	ESP-HMR.16/D Double supply version	003903179	30	ESP-HMS.2	003903188	80
	Accessories											
10	End section (grey) for ESP-HMM.2, ESP-HMM.2/1+2			ESP-HMR.16-2/ PT	003903180	10	ESP-HMR.16-2/ PT	003903180	10	ESP-HMT.2/1+2/ PT	003903189	25
11	End section (grey) for ESP-HMM.4, ESP-HMM.4/1+2			ESP-HMR.16-4/ PT	003903181	10	ESP-HMR.16-4/ PT	003903181	10			
12	End section (grey) ESP-HMM.6			ESP-HMR.16-6/ PT	003903182	10	ESP-HMR.16-6/ PT	003903182	10			
13	Red partition			ESP-DFH/4	003903143	25	ESP-DFH/4	003903143	25			
14	Marking tag			ES-N...	page 946		ES-N...	page 946		ES-N...	page 946	
15	End bracket (spring Type)			ES-BTO	003903075	25	ES-BTO	003903075	25	ES-BTO	003903075	25
16	End bracket (screw Type)			ES-BT/3	003903229	25	ES-BT/3	003903229	25	ES-BT/3	003903229	25
17	Cross connections - bridges (non-insulated) to connect ESP-HMM.6	10 poles		ESC-PTC/08/10	003903161	25	ESC-PTC/08/10	003903161	25			
18	Cross connections - bridges (red, blue) to connect ESP-HMM.2	2 poles (red)								ESP-PTP/3/02/R	003903148	25
		2 poles (blue)								ESP-PTP/3/02/B	003903151	25
		3 poles (red)		ESP-PTP/3/03/R	003903149	25	ESP-PTP/3/03/R	003903149	25	ESP-PTP/3/03/R	003903149	25
		3 poles (blue)		ESP-PTP/3/03/B	003903152	25	ESP-PTP/3/03/B	003903152	25	ESP-PTP/3/03/B	003903152	25
		10 poles (red)		ESP-PTP/3/10/R	003903150	10	ESP-PTP/3/10/R	003903150	10	ESP-PTP/3/10/R	003903150	10
		10 poles (blue)		ESP-PTP/3/10/B	003903153	10	ESP-PTP/3/10/B	003903153	10	ESP-PTP/3/10/B	003903153	10
19	Cross connections - bridges (red, blue) to connect ESP-HMM.4	3 poles (red)		ESP-PTC/5/03/R	003903155	25	ESP-PTC/5/03/R	003903155	25			
		3 poles (blue)		ESP-PTC/5/03/B	003903158	25	ESP-PTC/5/03/B	003903158	25			
		10 poles (red)		ESP-PTC/5/10/R	003903156	10	ESP-PTC/5/10/R	003903156	10			
		10 poles (blue)		ESP-PTC/5/10/B	003903159	10	ESP-PTC/5/10/B	003903159	10			

Features of potential distribution terminal blocks ESP-HMR

- with UL94V-0 polyamide insulating body
- 16 mm²
- mounting onto rails according to IEC 60715 Std., "TH/35" Type
- available in grey RAL 7042 colour
- can be connected with ESP-HMM.2



Spring clamp potential distribution terminal block, single power supply



Spring clamp potential distribution terminal block, double power supply

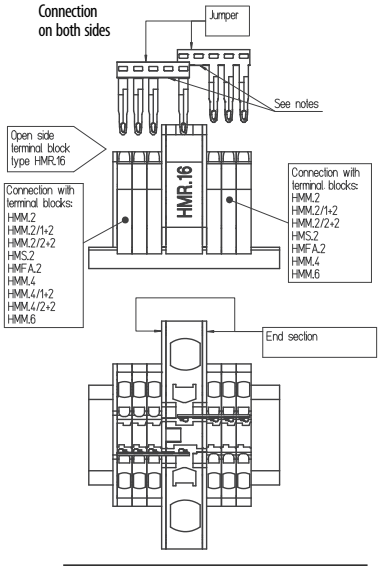
NOTES:
The number of poles to be used shall be equal to the number of terminal blocks to be connected, including the distribution terminal block + 1
To allow the connection to the distribution terminal block the second pin of the PTC jumper shall be trimmed off
*Connectable only on the open side of the distribution terminal block

Terminal block connected to supply terminal	End sections	Permanent cross connection (**)	
		Type	Total capacity
ESP-HMM.2	ESP-HMR.16-2/PT	ESP-PTP0303 ESP-PTP0310	24 A
ESP-HMM.4	ESP-HMR.16-4/PT	ESP-PTP0503 ESP-PTP0510	32 A
ESP-HMM.6	ESP-HMR.16-6/PT	ESP-PTC/08/10 poles	41 A

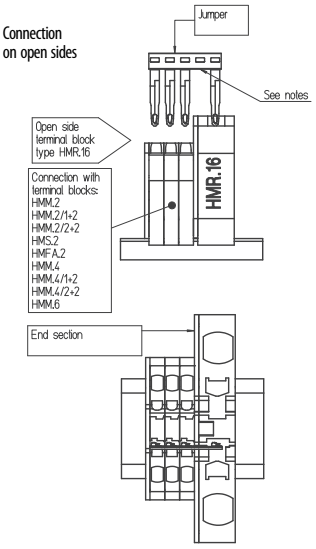
(**) In order to enable the connection to the supply terminal the second pin must be always removed from the strip of the PTC jumper.

Connection

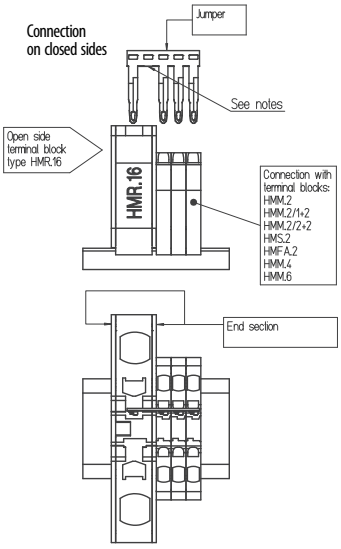
Connection on both sides



Connection on open sides



Connection on closed sides



The number of poles of the PTC jumper must be equal to to the number of terminal blocks to be cross-connected plus 1

Accessories for spring clamp terminal blocks

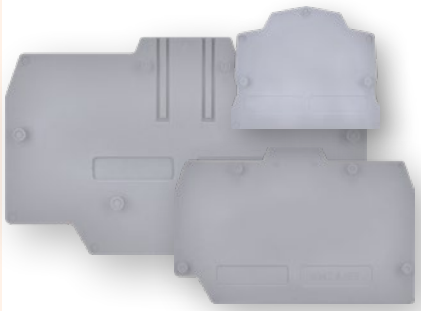
Terminal block	End section	
	Type	Thickness [mm]
ESP3-HLD.2	ESP3-HLD.2/PT	1,5
ESP-HMM.1	ESP-HMT.1/PT	1,5
ESP-HMM.2	ESP-HMT.2/PT	1,5
ESP-HMM.4	ESP-HMT.4/PT	1,5
ESP2-HMD.1	ESP2-HMD.1/PT	1,5
ESP2-HMD.2N	ESP2-HMD.1/PT	1,5
ESP-HMM.6	ESP-HMT.6/PT	1,5
ESP-HTE.1	ESP-HMT.1/PT	1,5
ESP-HTE.2	ESP-HMT.2/PT	1,5
ESP-HTE.4	ESP-HMT.4/PT	1,5
ESP-HTE.6	ESP-HMT.6/PT	1,5
ESP-HTE.10	ESP-HMT.10/PT	1,5
ESP-HTE.16	ESP-HMT.16/PT	1,5
ESP-HMM.1B	ESP-HMT.1/PT B	1,5
ESP-HMM.2B	ESP-HMT.2/PT B	1,5
ESP-HMM.4 B	ESP-HMT.4/PT B	1,5
ESP-HMM.6 B	ESP-HMT.6/PT B	1,5
ESP-HMM.10	ESP-HMT.10/PT	1,5
ESP-HMM.16	ESP-HMT.16/PT	1,5
ESP-HMM.10B	ESP-HMT.10/PTB	1,5
ESP-HMM.16B	ESP-HMT.16/PTB	1,5

ESP-PT end sections

For each Type and cross section of terminal block, there is a specific insulating and closing end section to be placed on the open element of each terminal board. This end section may also be used to separate different phases of adjoining terminal blocks linked by cross connections or to increase insulation distances where specific circumstances may require it. The end sections have the same overall dimension as the related terminal block, thicknesses are given in the table below.

End sections, grey color

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESP-HMT.1/PT	003903136	ESP-HMM.1, ESP-HTE.1	2,7	25
ESP-HMT.2/PT	003903137	ESP-HMM.2, ESP-HTE.2	2,8	25
ESP-HMT.4/PT	003903138	ESP-HMM.4, ESP-HTE.4	3,8	25
ESP-HMT.6/PT	003903139	ESP-HMM.6, ESP-HTE.6	4,2	25
ESP-HMT.10/PT	003903140	ESP-HMM.10, ESP-HTE.10	5	25
ESP-HMT.16/PT	003903141	ESP-HMM.16, ESP-HTE.16	6	25

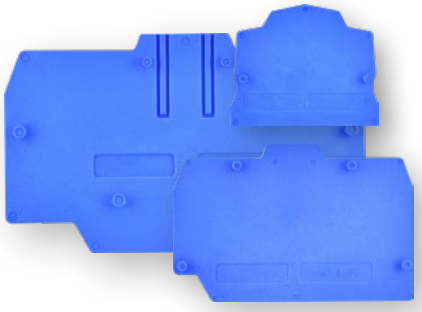


End sections, grey color

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESP-HMT.2/1+2/PT	003903189	ESP-HMM.2/1+2, ESP-HMS.2	3,4	25
ESP-HMT.4/1+2/PT	003903236	ESP-HMM.4/1+2	4,3	25

End sections, blue color

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESP-HMT.1/PTB	003903172	ESP-HMM.1B	2,6	25
ESP-HMT.2/PTB	003903173	ESP-HMM.2B	2,9	25
ESP-HMT.4/PTB	003903174	ESP-HMM.4B	3,4	25
ESP-HMT.6/PTB	003903175	ESP-HMM.6B	4	25
ESP-HMT.10/PTB	003903176	ESP-HMM.10B	10	25
ESP-HMT.16/PTB	003903177	ESP-HMM.16B	6	25



End section for two level terminal blocks

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESP2-HMD.1/PT	003903185	ESP2-HMD.1, ESP2-HMD.2N	4,9	25

End section for three level terminal blocks

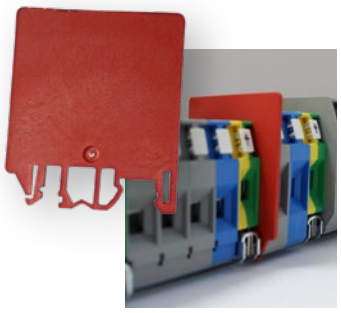
Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESP3-HLD.2/PT	003903187	ESP3-HLD.2	6	25

End sections for potential power distribution terminal blocks

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESP-HMR.16-2/PT	003903180	Connection to distribution ESP-HMM.2	8	10
ESP-HMR.16-4/PT	003903181	Connection to distribution ESP-HMM.4	8	10
ESP-HMR.16-6/PT	003903182	Connection to distribution ESP-HMM.6	9	10

ESP-DFH partitions

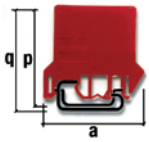
In polyamide available in red, colour, 1.5 mm thick, for the separation of elements on the terminal board, in order to make certain circuits easy to locate or to increase the insulation distances between terminal blocks.
The partitions can also be used to increase the insulation distances between adjacent parallel multiple commoning bars. White and green partitions available while stocks last.



Red partitions

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
ESP-DFH/1	003903142	ESP-HMM.1…ESP-HMM.6	4	25
ESP-DFH/4	003903143	ESP-HMM.10...ESP-HMM.16	6	25

Compatible also with two and three level spring terminal blocks

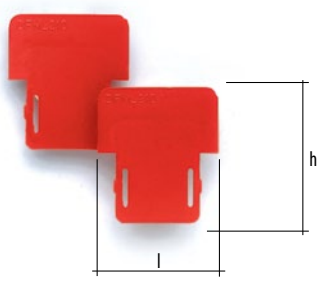


NOTE:
q dimension can be obtained by adding 4 mm to dimension p

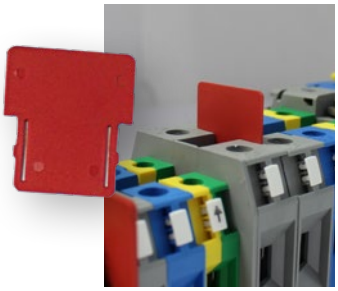
Partition	Dimensions a x p
ESP-DFH/4	97 x 51,5
ESP-DFH/1	64 x 42,5

ESP-DFM partition insulation of cross connections - bridges

Red coloured in polyamide when it is necessary to guarantee the insulation distance between permanent or switchable cross connections, inserted between adjacent pairs of terminal blocks and, similarly, between multiple commoning bars, inserted between adjacent groups of terminal blocks.



Partition	Dimensions l x h [mm]	Thickness [mm]
ESP-DFM/500	4,6 x 13,5	0,5

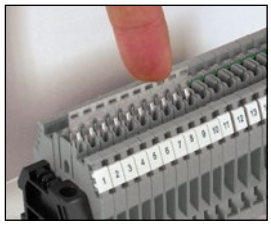


Red insulation partition to be used in case of cross connections - bridges

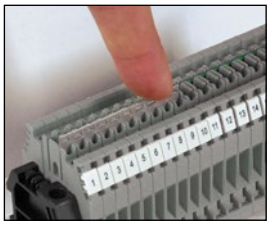
Type	Code No.	Dimension (for use with)	Weight [g]	Packaging [pcs]
ESP-DFM/500	003903144	4,5 x 13 (ESP-HMM.1)	0,1	50

Cross connections
Easy Bridge System

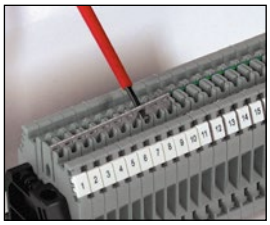
- screwless, snap-in insertion
- transversal and staggered mode connection possibility
- once inserted, intrinsically IPXXB protected resulting installation, without the need for further insulating covers
- patented system



1



2



3

1-2 After having cut the bar according to the number of poles, insert the cross-connection, in the appropriate groove of the terminal block. At this point, by using the blade of a screwdriver, push down the cross-connection until it reaches its blocking point. The cross connection will be fully insulated and intrinsically IPXXB protected.

3 To remove the cross-connection, insert the blade of the screwdriver in the jumper slot, then lift it up and finally extract it.

Terminal block	2-pole jumper	3-pole jumper	10-pole jumper
ESP-HMM.1(**)	ESP-PTC/1/02	ESP-PTC/1/03	ESP-PTC/1/10
ESP2-HMD.1	ESP-PTC/1/02	ESP-PTC/1/03	ESP-PTC/1/10
ESP-HMM.6	ESP-PTC/8/02		ESP-PTC/8/10
ESP-HMM.10	ESP-PTC/11/02		ESP-PTC/11/10
ESP-HMM.16	ESP-PTC/16/02		ESP-PTC/16/10

Insulated cross connection

Nr. Poles	PTP Series - Blue	PTP Series - Red
2	ESP-PTP/3/02/B	ESP-PTP/3/02/R
3	ESP-PTP/3/03/B	ESP-PTP/3/03/R
10	ESP-PTP/3/10/B	ESP-PTP/3/10/R
2	ESP-PTP/5/02/B	ESP-PTP/5/02/R
3	ESP-PTP/5/03/B	ESP-PTP/5/03/R
10	ESP-PTP/5/10/B	ESP-PTP/5/10/R


ESP-PTC/1/03


ESP-PTP3/03/B


ESP-PTP3/03/R

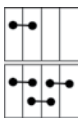

ESP-PTC/08/02

Cross connections - bridges

Type	Code No.	CROSS CONNECTIONS: nr. of poles, for use with, color	Weight [g]	Packaging [pcs]
ESP-PTC/1/02	003903145	2 POLE CROSS CONNECTION (ESP-HMM.1,ESP2-HMD.1)	1	25
ESP-PTC/1/03	003903146	3 POLE CROSS CONNECTION (ESP-HMM.1, ESP2-HMD.1)	1	25
ESP-PTC/1/10	003903147	10 POLE CROSS CONNECTION (ESP-HMM.1, ESP2-HMD.1)	3	10
ESP-PTP/3/02/R	003903148	2 POLE CROSS CONNECTION (ESP-HMM.2, ESP2-HMD.2) - RED	0,9	25
ESP-PTP/3/03/R	003903149	3 POLE CROSS CONNECTION (ESP-HMM.2, ESP2-HMD.2) - RED	1,4	25
ESP-PTP/3/10/R	003903150	10 POLE CROSS CONNECTION (ESP-HMM.2, ESP2-HMD.2) - RED	4,8	10
ESP-PTP/3/02/B	003903151	2 POLE CROSS CONNECTION (ESP-HMM.2, ESP2-HMD.2) - BLUE	0,9	25
ESP-PTP/3/03/B	003903152	3 POLE CROSS CONNECTION (ESP-HMM.2, ESP2-HMD.2) - BLUE	1,4	25
ESP-PTP/3/10/B	003903153	10 POLE CROSS CONNECTION (ESP-HMM.2, ESP2-HMD.2) - BLUE	4,8	10
ESP-PTP/5/02/R	003903154	2 POLE CROSS CONNECTION (ESP-HMM.4) - RED	1,3	25
ESP-PTP/5/03/R	003903155	3 POLE CROSS CONNECTION (ESP-HMM.4) - RED	1,9	25
ESP-PTP/5/10/R	003903156	10 POLE CROSS CONNECTION (ESP-HMM.4) - RED	6,4	10
ESP-PTP/5/02/B	003903157	2 POLE CROSS CONNECTION (ESP-HMM.4) - BLUE	1,3	25
ESP-PTP/5/03/B	003903158	3 POLE CROSS CONNECTION (ESP-HMM.4) - BLUE	1,9	25
ESP-PTP/5/10/B	003903159	10 POLE CROSS CONNECTION (ESP-HMM.4) - BLUE	6,4	10
ESP-PTC/8/02	003903160	2 POLE CROSS CONNECTION (ESP-HMM.6)	2	25
ESP-PTC/8/10	003903161	10 POLE CROSS CONNECTION (ESP-HMM.6)	12	10
ESP-PTC/11/02	003903162	2 POLE CROSS CONNECTION (ESP-HMM.10)	5	25
ESP-PTC/11/10	003903163	10 POLE CROSS CONNECTION (ESP-HMM.10)	12	10
ESP-PTC/16/02	003903164	2 POLE CROSS CONNECTION (ESP-HMM.16)	6	25
ESP-PTC/16/10	003903165	10 POLE CROSS CONNECTION (ESP-HMM.16)	12	10

Compatible also with two and three level spring terminal blocks

PTC jumper configurations

PTC / PTP cross-connection schemes						
	SINGLE OR PARALLEL EXTENDING	POLE SKIPPING	ADJACENT WITH BARRIER	STAGGERED MODE	PARALLEL SKIPPING	
Terminal block	**Isolation voltage [V]**					**I_{max} (A)**
ESP-HMM.1	630	630	320	630	630	17,5
ESP-HMM.2	630	630	320	630	630	24
ESP-HMM.4	500	500	500	500	500	32
ESP-HMM.6	500	500	500	500	500	41
ESP-HMM.10	1000	1000	800	1000	800	57
ESP-HMM.16	1000	1000	800	1000	800	76
ESP2-HMD.1	500	500	320	500	500	17.5
ESP2-HMD.2N	500	500	320	500	500	24
ESP3-HLD.2	500	500	500	500	500	24
ESP-HMS.2	630	500	-	-	-	24

When connecting groups of terminals of different potential, it is necessary to install jumper separators (ESC-DFM partition insulation of cross connections) to prevent electrical breakthrough and ensure the dielectric distance between plug-in jumpers. When installing the jumpers according to the scheme, the installation of the jumper separator is **mandatory**!

* between lower adjacent cross connections (with barrier)

** between upper adjacent cross connections (with barrier)

Common Screw And Spring Type Accessories

End bracket

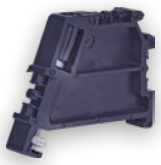
ES-BTO
End bracket suitable for IEC 60715/TH35 rails (our Types PR/3); it is mounted directly in the desired position and does not require screw fixing. Particularly suitable if there are rail fixing screws with high heads:
- in black polyamide
- thickness: 8 mm

ES-BT/3
To be mounted on rails in accordance with the IEC 60715/TH35 standard (our Type PR/3). Requires screw fixing:
- in black polyamide
- thickness: 8 mm

End bracket

Type	Code No.	Description	Weight [g]	Packaging [pcs]
ES-BTO	003903075	End bracket for DIN rail TH35	8	25
ES-BT/3	003903229		6	25

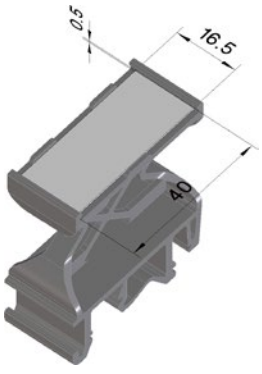

ES-BTO


ES-BT/3

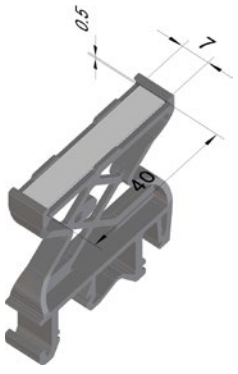
Marking tags
- Marking tags ES-NU0851 suitable for marking all Types of terminal blocks (screw-clamp and spring-clamp) in tables of 100 elements in packs of 500 tags; must be ordered in multiples of 100 pcs
- In white polycarbonate with black printing, to be applied directly into position either before or after preparing the terminal board; tag dimensions: 8 x 5.1 mm
- Marking tags ES-TAP1640AW: must be ordered in multiples of 150 pcs (1 plate).
- Marking tags ES-TAP407AW: must be ordered multiple of 360 pcs (1 plate).

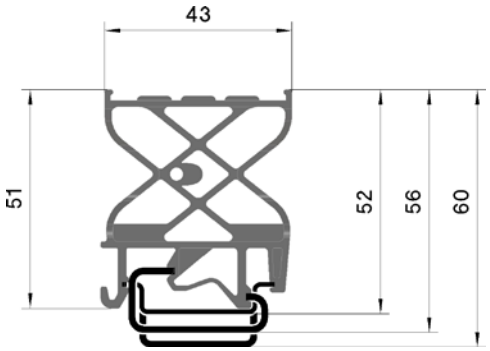
Dimensions

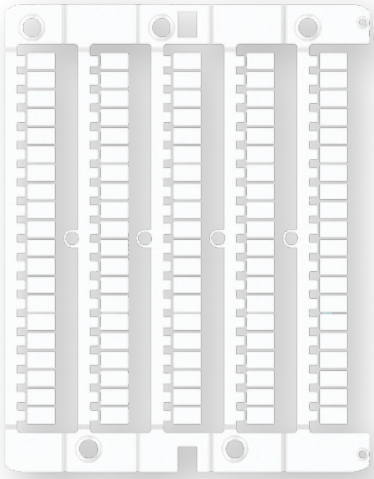
ES-PTM + ES-TA1640AW



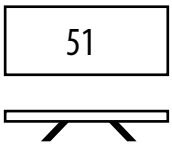
ES-PTMS + ES-TA407AW





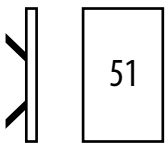


Writing Type

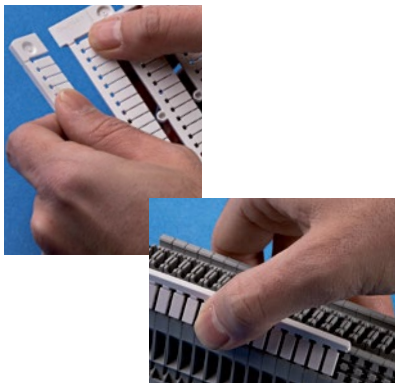


HORIZONTAL

Writing Type



VERTICAL



ES-PTM

ES-PTMS

Marking tags for all Types of terminals with rated cross section 2,5mm²...240mm²

Type	Code No. / 1 pc	Description	Weight [g]	Packaging [pcs]
ES-NU0851	003903076	Blank tags	0,2	1500
ES-NU0851001	003903077	Tags no. 1 to 50	0,2	500
ES-NU0851051	003903078	Tags from 51 to 100	0,2	500
ES-NU0851101	003903079	Tags from 101 to 150	0,2	500
ES-NU0851151	003903080	Tags from 151 to 200	0,2	500
ES-NU0851201	003903081	Tags from 201 to 250	0,2	500
ES-NU0851251	003903082	Tags from 251 to 300	0,2	500
ES-NU0851301	003903083	Tags from 301 to 350	0,2	500
ES-NU0851351	003903084	Tags from 351 to 400	0,2	500
ES-NU0851401	003903085	Tags from 401 to 450	0,2	500
ES-NU0851451	003903086	Tags from 451 to 500	0,2	500
ES-NU0851501	003903087	Tags from 501 to 550	0,2	500
ES-NU0851551	003903088	Tags from 551 to 600	0,2	500
ES-NU0851601	003903089	Tags from 601 to 650	0,2	500
ES-NU0851651	003903090	Tags from 651 to 700	0,2	500
ES-NU0851701	003903091	Tags from 701 to 750	0,2	500
ES-NU0851751	003903092	Tags from 751 to 800	0,2	500
ES-NU0851801	003903093	Tags from 801 to 850	0,2	500
ES-NU0851851	003903094	Tags from 851 to 900	0,2	500
ES-NU0851901	003903095	Tags from 901 to 950	0,2	500
ES-NU0851951	003903096	Tags from 951 to 1000	0,2	500
ES-NU0851510	003903097	Tags from 1 to 10	0,2	500
ES-NU0851520	003903098	Tags from 11 to 20	0,2	500
ES-NU0851530	003903099	Tags from 21 to 30	0,2	500
ES-NU0851540	003903100	Tags from 31 to 40	0,2	500
ES-NU0851550	003903101	Tags from 41 to 50	0,2	500
ES-NU0851560	003903102	Tags from 51 to 60	0,2	500
ES-NU0851570	003903103	Tags from 61 to 70	0,2	500
ES-NU0851580	003903104	Tags from 71 to 80	0,2	500
ES-NU0851590	003903105	Tags from 81 to 90	0,2	500
ES-NU0851600	003903106	Tags from 91 to 100	0,2	500
ES-NU08510L1	003903107	Tags L1	0,2	500
ES-NU08510L2	003903108	Tags L2	0,2	500
ES-NU08510L3	003903109	Tags L3	0,2	500
ES-NU0851N	003903110	Tags N	0,2	500
ES-NU08510PE	003903111	Tags PE	0,2	500
ES-NU085110	003903112	Tags =	0,2	500
ES-NU085111	003903113	Tags +	0,2	500
ES-NU085112	003903114	Tags -	0,2	500
ES-NU085114	003903115	Tags earth	0,2	500
ES-NU0851R	003903116	Tags R	0,2	500
ES-NU0851S	003903117	Tags S	0,2	500
ES-NU0851T	003903118	Tags T	0,2	500
ES-NU0851UV	003903119	Tags U	0,2	500
ES-NU0851V	003903120	Tags V	0,2	500
ES-NU0851W	003903121	Tags W	0,2	500
ES-NU0851X	003903122	Tags X	0,2	500
ES-PTM	003903123	Support for markings (ES-TAP1640AW)	12,5	15
ES-PTMS	003903124	Support for markings (ES-TAP407AW)	6,4	36
ES-TAP1640AW	003903239	Blank marking (40 x 16 x 0,5 mm)	0,89	120
ES-TAP407AW	003903240	Blank marking (40 x 7 x 0,5 mm)	0,89	280
ES-NU1051S	003903232	Blank tags - used with SmartPrint printer	8	1500

Not compatible with HMM.1 (1,5mm² spring terminal blocks), use ESP-SHZ

ES-NU1051S - To be used with SmartPrint
- Tags for terminal blocks CBC-CBD-HMM multiple mounting on CBC.2, single tags on all other sections
- Material: polycarbonate thickness 1.6 mm
- Working temperature: -40 °/+80 °C
- Rub resistance: CEI 16-7.

Numbering strips ESP-SHZ, ESP-SH004S

ESP-SHZ, ESP-SH004S numbering strips can be mounted on the sides of the terminal block or in the appropriate housings provided in the upper part of the terminal block itself.

Marking tags for spring terminals with rated cross section 1,5mm² (ESP-HMM.1, HTE.1)

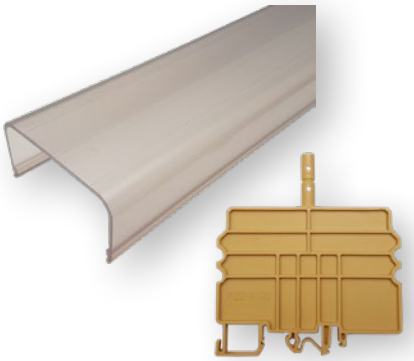
Type	Code No.	Description	Weight [g]	Packaging [pcs]	Min order [pcs]
ESP-SHZ/1/1_10	003903196	Tags no. 1 to 10	0,2	500	100
ESP-SHZ/1/1_50	003903197	Tags no. 1 to 50	0,2	500	100
ESP-SHZ/1/51_100	003903198	Tags from 51 to 100	0,2	500	100
ESP-SH004S	003903238	Blank tags for Cabur HMM.1 terminal block - used with SmartPrint printer	8	1500	1500

Additional covers for terminals and supports

Terminal blocks having a cross-section up to 70 mm^2 can be protected against accidental contacts or tampering, by means of a PVC transparent cover, supplied in a standard lenght of 2 m, to be mounted on appropriate polyamide supports and to be inserted on PR/DIN, PR/3, "G32" Type and TH/35 mounting rails. They can be fixed by sealing the support ends.

Features

- ES-PZM.4 cover suitable for terminal blocks with overall dimension up to approximately 58 mm (mounting rail included).
- ES-PZM.6 cover suitable for terminal blocks with overall dimension over 58 mm, (mounting rail included).



Additional covers for terminals and supports

Type	Code No.	Description, for use with	Weight [g]	Packaging [pcs]
ES-PZM.4	003903200	Protection cover (2m, 66mm x 32 mm), ES-PZD.4/SO	410	2
ES-PZD.4/SO	003903201	Support for ES-PZM.4	14	20
ES-PZM.6	003903202	Protection cover (2m, 87mm x 36 mm), ES-PZD.6/SO	326	2
ES-PZD.6/SO	003903203	Support for ES-PZM.6	8,15	10

Technical data for ES-PZM Series

			ES-PZM.4	ES-PZM.6	ES-PZM.4 + ES-PZD.4/SO	ES-PZM.6 + ES-PZD.6/SO
Technical characteristics			**Technical characteristics**			
Dimensions	Type	(mm)	a = 64+2 / b = 32	a = 85+2 / b = 36		
Mounted with support			ES-PZD.4/SO	ES-PZD.6/SO		
Maximum dimension:		(mm)				
on IEC 60715/G32 mounting rail					70 / 82 (*)	82 / 94 (*)
on IEC 60715/TH35 mounting rail					65 / 77 (*)	78 / 90 (*)

(*) depending on the notches used, upper or lower.