# Line-up terminals

# 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 gray (RAL 7042) color. The FIX series is Panelmount 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 2,5mm<sup>2</sup>...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.



ESC-POF permanent cross connections 2 pole and Commoning bar (16 holes) for 16 mm<sup>2</sup> and 35 mm<sup>2</sup>

"Easy bridge" system: double possibility to insert PTC, PTP multi-pole crossconnections, 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 mm<sup>2</sup> in grey and blue color.

ETICONNECT

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





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<sup>2</sup> 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.





ESC-SFR series terminals for connection conductors with a cross section of 0.2 to 10 mm<sup>2</sup> 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



Screw terminals series ESC-GPM / FIX mounted on the mounting panel, have protective covers for prevention accidental touch to High current terminal blocks series ESC-GPM / FIX are mounted on the mounting panels. Protective covers prevent accidental touch of the conductor.

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.

# Line-up terminal

# Features

ESC-CBC Series

- with UL94V-0 polyamide insulating body
- reduced overall dimension
- patented "Easy bridge" system: double possibility to insert PTC multi-pole cross-connections, without the need of insulating protection
- available in grey RAL 7042 and blue RAL 5015 colour version
- operating temperature range: -40 ÷ +80 °C

PTC jumper configurations							
SINGLE OR PARALLEL EXTENDING	POLE SKIPPING	ADJACENT WITHOUT BARRIER	ADJACENT WITH BARRIER	STAGGERED MODE	PARALLEL Skipping		
••	• • • •	•••	•••	••	• •		
• • • •	200 m 1 1 m 1 1 m 1 1 m 1 1 1		<ol> <li>Journal Manuelli, J. Structure Manuelli,</li> </ol>		10 m 1 m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m 1 m m		

500
500
630
630
-
-

# Technical data for ESC-CBC Series - grey and blue versions

	ESC-CBC.2(B)	ESC-CBC.4(B)	ESC-CBC.6(B)	ESC-CBC.10(B)	ESC-CBC.16(B)	ESC-CBC.35(B)	ESC-CBD.50(B)	ESC-CBD.70B
TECHNICAL CHARACTERISTICS					LDC CDC. 10(D)			LSC CDD.70D
function / type					ed-through			
rated cross-section (mm <sup>2</sup> )	2,5	4	6	10	25	50	50	70
connecting capacity:								
flexible(mm <sup>2</sup> )	0,2÷4	0,2÷6	0,2 ÷ 10	1,5 ÷ 16	1,5 ÷ 25	2,5 ÷ 50	1.5 ÷ 50	1.5 ÷ 95
rigid(mm²)	0,2÷4	0,2÷6	0,2 ÷ 10	1,5 ÷ 16	1,5 ÷ 25	2,5 ÷ 50	1 ÷ 70	1 ÷ 95
max. flexible with ferrule (mm <sup>2</sup> )-ferrule type	2,5 - WP25/14	4 - WP40/16	6 - WP60/20	10 - WP100/21	16 - WP160/22	35 - WP350/30	50 - WP500/40	-
rated voltage / rated current / gauge conf. to IEC 60947-7-1	1000 V / 32 A (4 mm²) / A3	1000 V / 41 A (6 mm²) / A4	1000 V / 57 A (10 mm²) / A5	1000 V / 76 A (16 mm²) / B6	1000 V / 101 A (25 mm²) / B7	1000 V / 150 A (50 mm²) / B9	1000 V / 150 A	1000 V / 192 A
rated voltage / rated current / AWG / tightening torque value UL	600 V / 20 A / 20-12 AWG / 0,4 Nm	600 V / 30 A / 20-10 AWG / 0,5 Nm	600 V / 50 A / 20-8 AWG / 1,7 Nm	600 V / 65 A / 14-6 AWG / 1,9 Nm	600 V / 100 A / 16-3 AWG / 2,8 Nm	600 V / 125 A / 20-1 AWG / 8,47 Nm	600 V / 130 A (*) / 16-1 AWG / 45 Nm	600 V / 220 A / 12 - 4/0 AWG / 68 Nm
max current (*)	27 A (2,5 mm <sup>2</sup> ) / 37 A (4 mm <sup>2</sup> )	38 A (4 mm²) / 45 A (6 mm²)	53 A (6 mm²) / 64 A (10 mm²)	70 A (10 mm²) / 85 A (16 mm²)	95 A (16 mm²) / 114 A (25 mm²)	134 A (35 mm²) / 160 A (50 mm²)		
rated impulse withstand voltage / pollution degree	12 KV / 3	12 KV / 3	12 KV / 3	12 KV / 3	12 KV / 3	12 KV / 3	12 KV / 3	12 KV / 3
insulation stripping length (mm)	9	10	10	12	15	18	22	26
tightening torque value (test / max) (Nm)	0,4 / 0,8	0,5 / 1,2	0,8 / 1,4	1,2 / 1,9	2/3	2,5 / 5	2,5/5	3/8
height / width / thickness TH/35 7,5 mm	52 / 44 / 5	52/44/6	52/44/8	52 / 44 / 10	56 / 47 / 12	63 / 56 / 16	62 / 57 / 18	71 / 62 / 20,5
height / width / thickness TH/35 15 mm	60 / 44 / 5	60/44/6	60 / 44 / 8	60 / 44 / 10	64 / 47 / 12	71 / 56 / 16	70 / 57 / 18	79 / 62 / 20,5
Marking tag printed or blank	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851

#### Easy Bridge System

The cross-connection can be supplied in "standard" sizes, for 2-3-10 poles.

- 1 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.
- 2 To remove the cross-connection: insert the blade of the screwdriver in the jumper slot, then lift it up and finally extract it.

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 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 M x I [mm]	Sleeve Ø x I [mm]	Plate I 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

Terminal block	Screw/sleeve	Commoning bar	Commoning bar (Length, I 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

#### **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.

Tomata al bla da	End section				
Terminal block	Туре	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-TEO.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-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-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.



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-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.



Terminal block	Partition	Dimensions I 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

Technical data for ESC-GPA & /FIX Series					
		ESC-GPA.70 & /FIX	ESC-GPA.95 & /FIX	ESC-GPA.150 & /FIX	ESC-GPA.240 & /FIX
TECHNICAL CHARACTERISTICS					
function / type		feed-through	feed-through	feed-through	feed-through
rated cross-section	(mm²)	70	95	150	240
connecting capacity:					
flexible	(mm²)	10 ÷ 95	10 ÷ 95	50 ÷ 150	95 ÷ 240
rigid	(mm²)	10 ÷ 95	10 ÷ 120	50 ÷ 185	$50 \div 300$
bars and/or cable lugs		-	-	-	-
rated voltage / rated current / gauge conf. to IEC 60947-7-	1	1000 V / 192 A / B11	1000 V / 232 A / B12	1000 V / 309 A / B14	1000 V / 415 A / B16
rated voltage / rated current / AWG / tightening torque val	ue UL	1000 V / 215 A / 8 AWG str. ÷ 4/0 AWG str. / 79,5 lb.in	1000 V / 232 A / 2 AWG sol./str. ÷ 250 MCM str. / 90 lb.in.	1000 V / 309 A / 1/0 AWG str ÷ 350 MCM str. / 142 lb.in	1000 V / 415 A / 3/0 AWG str. ÷ 600 MCM str. / 300 lb.in.
rated impulse withstand voltage / pollution degree		12 KV / 3	12 KV / 3	12 KV / 3	12 KV / 3
insulation stripping length	(mm)	25	30	35	40
tightening torque value - bar (test / recommended)	(Nm)	-	-	-	-
tightening torque value - cable (test / recommended)	(Nm)	6 / 9 (Allen screw, 4 mm wrench)	6 / 9 (Allen screw, 4 mm wrench)	10 / 15 (Allen screw, 5 mm wrench)	14 / 21 (Allen screw, 6 mm wrench)
height / width / thickness	TH/35 7,5 mm - س	70 / 91 / 20,5	87 / 98 / 26	99 / 108 / 31	120 / 119 / 37
height / width / thickness	<b>└─</b> ∫ TH/35 15 mm	78 / 91 / 20,5	95 / 98 / 26	106 / 108 / 31	128 / 119 / 37
height / width / thickness	G32	75 / 91 / 20,5	91 / 98 / 26	103 / 108 / 31	124 / 119 / 37
height / width (fixing distance between centres) / thicknes	ss (panel mount)	75 / 102 (88) / 20,5	91 / 111 (97) / 26	94 / 122 (106) / 31	115 / 134 (118) / 37
Marking tag	printed or blank	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851
End bracket		ES-BTO, ES-BT/3	ES-BTO, ES-BT/3	ES-BTO, ES-BT/3	ES-BTO, ES-BT/3

ESC-GPM.FIX Series high current terminal block

- conductor: cable or bar
- nominal voltage 1000 V
- panel mount version M6 screws (recommended with screwdriver and washer slot)
- available in grey
- operating temperature range: -40 ÷ +80 °C
- maximum continual operating temperature 100°C
- extra protection for bars

Technical data for ESC-GPM.FIX Series - Panel-mount ve	rsion				
	ESC-GPM.95 & /FIX	ESC-GPM.150 & /FIX	ESC-GPM.240 & /FIX		
TECHNICAL CHARACTERISTICS					
function / type	feed-through	feed-through	feed-through		
rated cross-section (mm <sup>2</sup> )	95/150	150/240	240/300		
bars and/or cable lugs	22 mm maximum width (M8 bolt) (*)	32 mm maximum width (M10 bolt) (**)	40 mm maximum width (M12 bolt) (***)		
rated voltage / rated current / gauge conf. to IEC 60947-7-1	1000 V / 232 A	1000 V / 309 A	1000 V / 415 A		
max. current	320A	440A	600A		
rated impulse withstand voltage / pollution degree	12 KV / 3	12 KV / 3	12 KV / 3		
tightening torque value - bar (test / recommended) (Nm)	6 / 9 (13 mm wrench)	10 / 15 (key 17 mm)	14 / 21 (key 19 mm)		
height / width (fixing distance between centres) / thickness (panel mount)	76 / 176 (158) / 32	76 / 200 (158) / 42	84 / 250 (172) / 52		
Marking tag printed or blank	ES-NU0851	ES-NU0851	ES-NU0851		
End bracket	ES-BTO, ES-BT/3	ES-BTO, ES-BT/3	ES-BTO, ES-BT/3		

(\*) distance between the cable lug fixing screw axis and the conducting body: 10 mm

(\*\*) distance between the cable lug fixing screw axis and the conducting body: 12 mm

(\*\*\*) distance between the cable lug fixing screw axis and the conducting body: 15 mm

# Technical data

# Features

# Earth terminal blocks ESC-TEO

- with UL94V-0 polyamide insulating body
- mounting onto rails according to IEC 60715 Std., "G32" and "TH/35" types
- in a single green / yellow insulating case

#### Technical data for ESC-TEO Series - version for DIN rail mounting

		ESC-TE0.2	ESC-TE0.4
TECHNICAL CHARACTERISTICS			
function / type		earth	earth
rated cross-section	(mm²)	2,5	4
connecting capacity:			
flexible(mm <sup>2</sup> )		0,2 ÷ 4	0,2 ÷ 6
rigid(mm <sup>2</sup> )		0,2 ÷ 4	0,2 ÷ 6
max. flexible with ferrule (mm <sup>2</sup> )-ferr	rule type	2,5 - WP25/14	4 - WP40/16
rated voltage / rated current / gauge	conf. to IEC 60947-7-1	- / - / A3	- / - / A4
rated voltage / rated current / AWG /	tightening torque UL	- / - / 20-14 AWG / 5,5 lb.in.	- / - / 20 ÷ 12 AWG / 5,5 lb.in.
rated impulse withstand voltage / po	ollution degree	8 KV / 3	8 KV / 3
insulation stripping length	(mm)	12	14
tightening torque value (test / max)	(Nm)	0,4 / 0,8	0,5 / 1,2
height / width / thickness	<b>۲</b> H/35 7,5 mm	47 / 50 / 5,5	52 / 50 / 6,5
height / width / thickness	<b>└──</b> ∫ TH/35 15 mm	55 / 50 / 5,5	60 / 50 / 6,5
height / width / thickness	G32	-	-
Marking tag	printed or blank	ES-NU0851	ES-NU0851

	MAXIMUM SHORT-TIME WITHSTAND CURRENTS ALLOCATED TO THE RAIL PROFILE						
Rail profile	Material	Equivalent E-cu cross-section mm <sup>2</sup>	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 Copper Aluminium	10 25 16	1,2 3 1,92	- 101 76			
G32-type rail IEC 60715/G32	Steel Copper Aluminium	35 120 70	4,2 14,4 8,4	- 269 192			
"Top hat" rail IEC 60715/TH 35 - 7,5	Steel Copper Aluminium	16 50 35	1,92 6 4,2	- 150 125			
"Top hat" rail IEC 60715/TH 35 - 15	Steel Copper Aluminium	50 150 95	6 18 11,4	- 309 232			

Taken from CEI EN 60947-7-2 standard

#### Features

#### Earth terminal blocks ESC-TEC

- with UL94V-0 polyamide insulating body
- mounting onto rails according to IEC 60715 Std., "G32" and "TH/35" types
- in 2 green / yellow insulating cases
- same profile and dimensions of the corresponding terminals of the ESC-CBC and ESC-GPA Series

# Technical data for ESC-TEC Series - version for DIN rail mounting

		ESC-TEC.6/0	ESC-TEC.10/0	ESC-TEC.16/0	ESC-TEC.35/0	ESC-TEC.70/0
TECHNICAL CHARACTERISTICS						
function / type		earth terminal block				
rated cross-section	(mm²)	6	10	16	35	71
connecting capacity:						
flexible(mm <sup>2</sup> )		0,5 ÷ 10	1,5 ÷ 16	1,5 ÷ 25	2,5 ÷ 50	10 ÷ 95
rigid(mm²)		0,5 ÷ 10	1,5 ÷ 16	1,5 ÷ 25	2,5 ÷ 50	10 ÷ 95
max. flexible with ferrule (mm <sup>2</sup> )-fer	rule type	6 - WP60/20	10 - WP100/21	16 - WP160/22	-	-
rated voltage / rated current / gauge	e conf. to IEC 60947-7-1	- / 41 A / A5	- / 57 A / B6	- / 76 A / B7	- / 125 A / B9	- / 192 A / B11
rated voltage / rated current / AWG l	JL	-	-	-	-	-
max current (*)		-	-	-	-	-
rated impulse withstand voltage / p	ollution degree	12 KV / 3				
insulation stripping length	(mm)	10	12	18	18	25
tightening torque value (test / max)	(Nm)	0,8/1,4	1,2 / 1,9	-	2,5 / 5	6/9
height / width / thickness	<b>۲</b> H/35 7,5 mm	52 / 44 / 8	52 / 44 / 10	56 / 47 / 12	63 / 56 / 16	74 / 70 / 20,5
height / width / thickness	<b>└──</b> ∫ TH/35 15 mm	60 / 44 / 8	60 / 44 / 10	64 / 47 / 12	71 / 56 / 16	81,5 / 70 / 20,5
height / width / thickness	G32	53 / 44 / 8	53 / 44 / 10	57 / 47 / 12	64 / 56 / 16	75 / 70 / 20,5
Marking tag	printed or blank	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851

	MAXIMUM SHORT-TIME WITHSTAND CURRENTS ALLOCATED TO THE RAIL PROFILE					
Rail profile	Material	Equivalent E-cu cross-section mm <sup>2</sup>	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 Copper Aluminium	10 25 16	1,2 3 1,92	- 101 76		
G32-type rail IEC 60715/G32	Steel Copper Aluminium	35 120 70	4,2 14,4 8,4	- 269 192		
"Top hat" rail IEC 60715/TH 35 - 7,5	Steel Copper Aluminium	16 50 35	1,92 6 4,2	- 150 125		
"Top hat" rail IEC 60715/TH 35 - 15	Steel Copper Aluminium	50 150 95	6 18 11,4	- 309 232		

Taken from CEI EN 60947-7-2 standard

### Features

- $\operatorname{ESC2-DBC}$  Series on two & three levels
- with UL94V-0 polyamide insulating body
- feed-through
- feed-through, equipped with internal cross-connection
- available in standard grey RAL 7042
- to be mounted according to IEC 60715 Std., "TH/35" type
- ESC2-DBC.4: Four slots meant for insert permanent cross-connection "Easy Bridge"

		PTC jumper co	onfigurations			
SINGLE OR PARALLEL EXTENDING	POLE Skipping	ADJACENT WITHOUT BARRIER	ADJACENT WITH BARRIER	STAGGERED MODE	PARALLEL Skipping	
••	• • •	•••	•••	••	•••	
Insulation voltage in the above configurations (V)						
630	500		250 (*) 630 (**)	500	500	

#### Technical data for ESC2-DBC Series

		ESC2-DBC.2	ESC2-DBC.4
TECHNICAL CHARACTERISTICS			
function / type		2 level feed-through	2 level feed - through
rated cross-section	(mm²)	2,5	4
connecting capacity:			
flexible(mm <sup>2</sup> )		0,2 ÷ 4	0,2 ÷ 6
rigid(mm <sup>2</sup> )		0,2 ÷ 4	0,2÷6
max. flexible with ferrule (mm <sup>2</sup> )-ferru	lle type	2,5 - WP25/14	4 - WP40/16
rated voltage / rated current / gauge	conf. to IEC 60947-7-1	630 V / 24 A / A3	630 V / 32 A / A4
rated voltage / rated current / AWG / 1	ightening torque value UL	600 V / 20 A / 28-12 AWG / 8 lb.in	-
max current (***)		27 A (2,5 mm <sup>2</sup> ) / 34 A (4 mm <sup>2</sup> )	-
rated impulse withstand voltage / po	lution degree	8 KV / 3	8 KV / 3
insulation stripping length	(mm)	9	9
tightening torque value (test / max)	(Nm)	0,4 / 0,8	0,5 / 1
height / width / thickness	TH/35 7,5 mm ريم	66 / 70 / 5	66 / 70 / 6
height / width / thickness	<b>└──</b> TH/35 15 mm	74 / 70 / 5	74/70/6
Marking tag	printed or blank	ES-NU0851	ES-NU0851

(\*)between lower levels (with partition)

(\*\*)between upper levels (with partition)

(\*\*\*\*) value referred to the characteristics of the terminal block alone, within the temperature range according to IEC 60947-7-1 Std.

# Technical data for ESC2-DBC Series

	ESC-TLD.2(B)	ESC-TDE.2
	3 feed-through levels	2 feed-through levels + earth
(mm²)	2,5	2,5
	0.2÷4	0.2÷4
	0.2÷4	0.2 ÷ 4
e type	2,5	2,5
onf. to IEC 60947-7-1	250 V / 24 A	250 V / 24 A
ghtening torque value UL	600 V / 15 A (*) / 20 – 12 AWG / 3.5 lb.in	600 V / 20 A (*) / 20 – 12 AWG / 3.5 lb.in
ution degree	4 KV / 3	4 KV / 3
(mm)	8	8
(Nm)	0.4/0.8	0.4 / 0.8
<b>۲</b> H/35 7,5 mm	52 / 85 / 6.2	52 / 85 / 6.2
<b>└──</b> ∫ TH/35 15 mm	60 / 85 / 6.2	60 / 85 / 6.2
printed or blank	ES-NU0851	ES-NU0851
	e type onf. to IEC 60947-7-1 ghtening torque value UL ution degree (mm) (Nm) (Nm) TH/35 7,5 mm	3 feed-through levels           (mm²)         2,5           0.2 ÷ 4         0.2 ÷ 4           0.2 ÷ 4         0.2 ÷ 4           0.1 2 ÷ 4         0.2 ÷ 4           0.2 ÷ 4         0.2 ÷ 4           0.1 2 ÷ 4         0.2 ÷ 4           0.2 ÷ 4         0.2 ÷ 4           0.1 2 ÷ 4         0.2 ÷ 4           0.2 ÷ 4         0.2 ÷ 4           0.1 2 ÷ 4         0.2 ÷ 4           0.2 ÷ 4         0.2 ÷ 4           0.1 2 ÷ 4         0.2 ÷ 4           0.2 ÷ 4         0.2 ÷ 4           0.1 2 ÷ 0 ∪ 2 ÷ 4         0.2 ÷ 4           0.1 2 ÷ 0 ∪ 2 ÷ 4         600 V / 15 A (*) / 20 - 12 AWG / 3.5 lb.in           ution degree         4 KV / 3           (mm)         8           (Nm)         0.4 / 0.8           TH/35 7,5 mm         52 / 85 / 6.2           TH/35 15 mm         60 / 85 / 6.2

(\*)between lower levels (with partition)

(\*\*)between upper levels (with partition)

#### 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	Voltage [V] (*)	Current [A]	Protection against overload and short circuit	Only protection against short circuit	
block			(PV) - [W]	(PV) - [W]	
ESC-SFR.4	250	6,3	2,5	2,5	
ESC-SFR.6	250	10	2,5	4	

# Technical data for ESC-SFR Series

lechnical data for ESC-SFR S	eries		
		ESC-SFR.4	ESC-SFR.6
TECHNICAL CHARACTERISTICS			
function / type		for ø 5 x 20 mm fuses	for ø 6,3 x 32 mm fuses
rated cross-section	(mm²)	4	6
connecting capacity:			
flexible(mm <sup>2</sup> )		0,2 ÷ 6	0,2 ÷ 10
rigid(mm²)		0,2 ÷ 6	0,2 ÷ 10
max. flexible with ferrule (mm <sup>2</sup> )-ferrule	type	4 - WP40/16	6 - WP60/20
rated voltage / rated current / gauge con	f. to IEC 60947-7-1	800 V (*) / 6,3 A max (20 A with CO/5) / A4	630 V (*) / 10 A / A5
rated voltage / rated current / AWG / tigh	itening torque value UL	600 V / 6,3 A / 20-12 AWG / 4,4 lb.in.	600 V / 10 A / 20-8 AWG / 13 lb.in
rated impulse withstand voltage / pollut	ion degree	6 KV / 3	6 KV (*) / 3
insulation stripping length	(mm)	11	11
tightening torque value (test / max)	(Nm)	0,5 / 1,2	0,8 / 1,4
height / width / thickness	<b>۲</b> H/35 7,5 mm	52 / 52 / 8	59 / 79 / 10
height / width / thickness	<b>└──</b> ∫ TH/35 15 mm	60 / 52 / 8	67 / 79 / 10
height / width / thickness	<b>G</b> 32	56 / 52 / 8	63 / 79 / 10
Marking tag	printed or blank	ES-NU0851	ES-NU0851

(\*) value referred to the insulation characteristics of the terminal block

Conducting elements ESC-CO/5 ø5 x 20 mm



### **Technical data for ESC-CBS Series**

Features	
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ESC-CBS.2 - DISCONNECT

- with UL94V-0 polyamide insulating body
- Disconnect lever
- Possibility to perform cross-connections
- "Easy Bridge" system: multi-pole cross-connection without the need of addictional protection
- Cross connections lined up with feed-through and fuse holders for a faster realisation of complicated circuits

		ESC-CBS.2
TECHNICAL CHARACTERISTICS		
function / type		Disconnect lever
rated cross-section	(mm²)	2
connecting capacity:		
flexible(mm <sup>2</sup> )	-	0,2÷4
rigid(mm²)		0,2÷4
max. flexible with ferrule (mm <sup>2</sup> )-ferrule type		2,5 - WP25/14
rated voltage / rated current / gauge conf. to IE	C 60947-7-1	630 V / 22 A / A3
rated voltage / rated current / AWG / tightening	-	
rated impulse withstand voltage / pollution deg	gree	6 KV / 3
insulation stripping length	(mm)	9
tightening torque value (test / max)	(Nm)	0,4 / 0,6
height / width / thickness	<b>۲</b> H/35 7,5 mm	52 / 57 / 5
height / width / thickness	<b>└──</b> ∫ TH/35 15 mm	60 / 57 / 5
ACCESSORIES		
End sections	grey	ESC-MPS.4/PT
Permanent cross connection		ESC-PTC/2/02
(intrinsically IPXXB protected once mounted)		ESC-PTC/2/10
Cross connection barrier	red	ESC-DFM/900
Marking tag	printed or blank	ES-NU0851

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

Technical data for ESC-SCB series					
			ESC-SCB.4 ESC-SCB.6		ESC-SCB.6/CD
TECHNICAL CHARACTERISTICS					
function / type		disconnect by slide link	disconnect by slide link	disconnect by slide link in special configuration for voltmetric circuits	disconnect by slide link in special configuration for amperometric circuits
rated cross-section	(mm²)	4	6	6	6
connecting capacity:					
flexible	(mm²)	0,2-6	0.5-10	0.5-10	0.5–10
rigid	(mm²)	0,2-6	0.5-10	0.5-10	0.5–10
max. flexible with ferrule	(mm²)	4	6	6	6
rated voltage / rated current / gauge conf. to IEC 60947-7-1		800 V / 32 A / A4	800 V / 41 A / A5	800 V / 41 A / A5	800 V / 41 A / A5
rated voltage / rated current / AWG / tightening torque value UL		600 V / 20 A / 20-12 AWG / 4.4 lb.in.	600 V / 47 A / 20-8 AWG / 13.3 lb.in.	-	-
rated impulse withstand voltage / pollution degree		8 KV / 3	8 KV / 3	8 KV / 3	8 KV / 3
insulation stripping length	(mm)	9	12	12	12
tightening torque value (test / recommended)	ing torque value (test / recommended) (Nm)		0.8 / 1.4	0.8 / 1.4	0.8 / 1.4
height / width / thickness	<b>۲</b> H/35 7,5 mm	44 / 58 / 6.5	65 / 69 / 8	76 / 69 / 8	77 / 69 / 8
height / width / thickness	TH/35 15 mm	52 / 58 / 6.5	73 / 69 / 8	84 / 69 / 8	85 / 69 / 8
height / width / thickness	G32	48 / 58 / 6.5	68 / 69 / 8	79 / 69 / 8	80 / 69 / 8
ACCESSORIES					
End section		ESC-SCB.4/PT	ESC-SCB.6/PT	ESC-SCB.6/PT	ESC-SCB.6/PT
Coloured partition		-	ESC-DFU/6/R	ESC-DFU/6/R	ESC-DFU/6/R
Test plug socket		ESC-PSD/A	ESC-PSD/P	2 pcs. Included	2 pcs. Included
Short-circuit plate between - 2 adjoining terminal blocks		-	ESC-SCB.6/PO-2	ESC-SCB.6/PO-2	ESC-SCB.6/PO-2
Short-circuit plate between - 4 adjoining terminal blocks			ESC-SCB.6/PO-4	ESC-SCB.6/PO-4	ESC-SCB.6/PO-4
Marking tag	printed or blank	ES-NU0851	ES-NU0851	ES-NU0851	ES-NU0851
End bracket		ES-BTO, ES-BT/3	ES-BTO, ES-BT/3	ES-BTO, ES-BT/3	ES-BTO, ES-BT/3

Technical data for ESC-QBLOK Se						
		ESC- QBLOK7001	ESC- QBLOK7002	ESC- QBLOK1201	ESC- QBLOK1202	
TECHNICAL CHARACTERISTICS						
function / type		Distribution rail assembly				
rated cross-section (mm <sup>2</sup> )		10				
connecting capacity:						
flexible(mm <sup>2</sup> )		1,5 ÷ 10				
rigid(mm²)		1,5 ÷ 16				
max. flexible with ferrule (mm <sup>2</sup> )-ferrule type		10 - WP100/21				
rated voltage / rated current / gauge conf. to IEC 60947-7-1		500 V / 63 A / B5				
rated impulse withstand voltage / pollution degree		-				
insulation stripping length	(mm)		(	5		
tightening torque value (test / max) (Nm)		2 / 2,5				
height / width / thickness	<b>r</b> TH/35 7,5 mm	33 - 53 - 16		33 - 85 - 16		
height / width / thickness	<b>└──</b> ∫ TH/35 15 mm	41 - 53 - 16 41 - 85		5 - 16		
Color		blue	green	blue	green	

Features
ESC-QBLOK
with UL94V-0 polyamide insulating
body
available in 7 and 12 hole versions
mounted onto PR/3 profiles
conforming to IEC 60715 standards,
TH/35 type
inherent protection against acciden-
tal contact IPXXB level according to
IEC 60529
possible to label with a CNU/8 tag
conformance to EN 60998-1:2004
and EN 60998-2-1:2004 regulations