

CONTROL CABINET PORTFOLIO

POWER OUTLETS
RELAY SOCKETS
INTERFACE RELAYS
ACCESSORIES



About SHC

Founded in 1997, SHC GmbH is one of Germany's leading distributors for active and passive components in Germany.



As an internationally operating company, we offer a wide range of high-quality components for commercial use only. We support our customers to procure components and accompany engineers and technicians through the entire design process.

In addition to direct procurement from well-known manufacturers, we also develop our own components, which are manufactured with the support of partner companies. Some of these products have special approvals for rail transport technology and are used by Deutsche Bahn.

From relay specialist to technical all-rounder

Known as relay specialist, the product portfolio of SHC GmbH today comprises far more than 100,000 components. In addition to relays we offer connectors, switches, transformers, sensors, frequency converters, resistors and much more.

Customers benefit from technical know-how of our employees and they can rely on our customer-oriented telephone service or our onsite service. Furthermore short delivery times can be achieved through high stock availability. SHC GmbH is a customer-oriented service provider based on high technical competence.

Quality Management - ISO 9001

SHC is certified according to ISO 9001:2015. Our quality management system is a useful tool for monitoring and a continually revised of our business processes. This ensures a consistently high level of quality, efficiency and responsiveness, which is reflected in the satisfaction of our customers and suppliers.

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Description

- Power outlet with LED-Indicator
- DIN-Rail mount
- Screw Terminal
- VDE Certificate No.. 40029547
- Snap mounting on DIN-rail EN60715
- Metal fixing hooks
- Fitting Labels



General Data

Housing Color	grey, RAL 7035
Country variant	Germany
Width	45 mm
Rated Voltage U_n	250 VAC
Rated Current I_n	16 A AC
Indicator	green LED with Resistor
Contact Material	CuZn37
Insulation material	PA66, UL94 V-0
Ambient Temperature	-20 .. +60 °C
Dimensions:	
Length	75mm
Width	45mm
Height	max. 65mm
Terminal data:	
Terminal Type	Screw Terminal with touch protected Terminals, all of the three power supply terminals (L1, N & PE) arranged on the underside.
Stripping length	8 mm
Screw Threads	M3
Wire Size:	
Solid Wire	0,2 - 8 mm ² / 12 -24 AWG
Stranded Wire	0,2 - 2,5 mm ²

Description

- Power outlet with LED-Indicator
- DIN-Rail mount
- Screw Terminal
- Snap mounting on DIN-rail EN60715
- Metal fixing hooks
- Fitting Labels

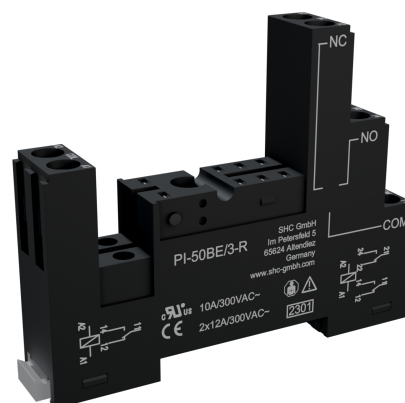


General Data

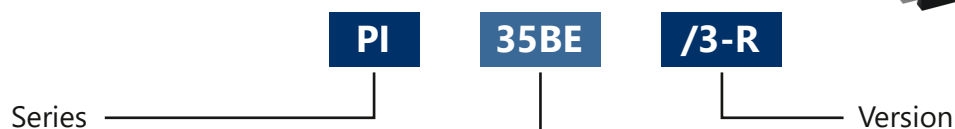
Housing Color	yellow, RAL 1018
Country variant	Germany
Width	45 mm
Rated Voltage U_n	250 VAC
Rated Current I_n	16 A AC
Indicator	green LED with Resistor
Contact Material	CuZn37
Insulation material	PA66, UL94 V-0
Ambient Temperature	-20 .. +60 °C
Dimensions:	
Length	75mm
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Terminal data:	
Terminal Type	Screw Terminal with touch protected Terminals, all of the three power supply terminals (L1, N & PE) arranged on the underside.
Stripping length	8 mm
Screw Threads	M3
Wire Size:	
Solid Wire	0,2 - 8 mm ² / 12 -24 AWG
Stranded Wire	0,2 - 2,5 mm ²

Description

- Plug-in Socket for 1- and 2-poles 15,7 mm Relays
- DIN-Rail mount
- 3,5 or 5 mm Grid
- Screw-, Push-In or Spring Terminals



Ordering information



35BE	Grid 3,5 mm 5 poles for 1-pole Relays
50BE	Grid 5,0 mm 8 poles for 1- and 2-poles Relays

NIL	Screw Terminal
/3-R	Screw Terminal secure insulation Coil/Contact
/3-CC	Spring Terminal secure insulation Coil/Contact
/3-PI	Push-In Terminal secure insulation Coil/Contact

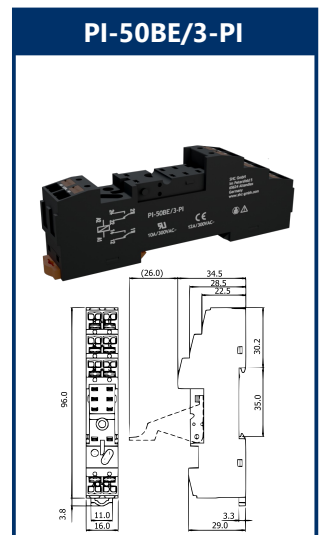
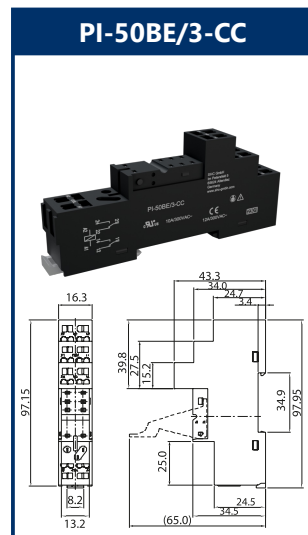
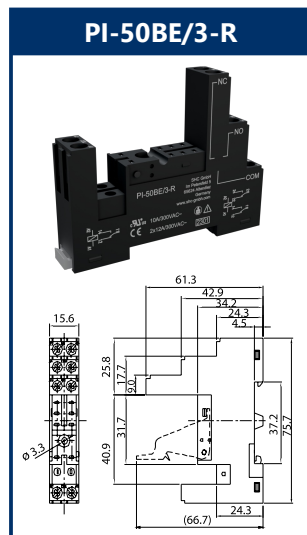
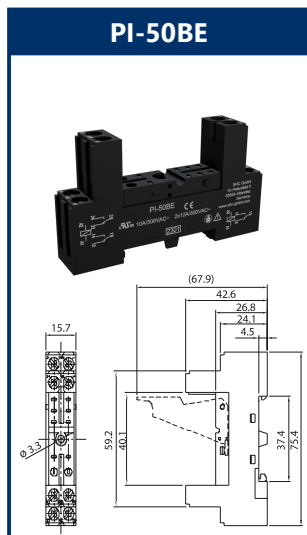
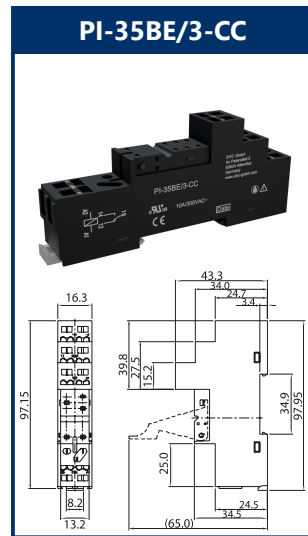
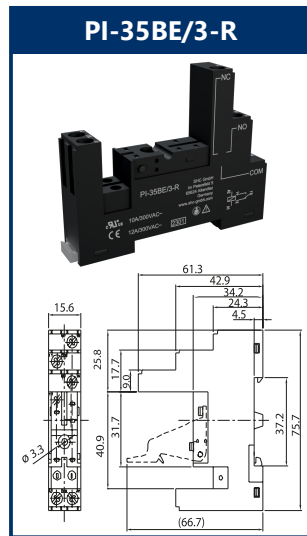
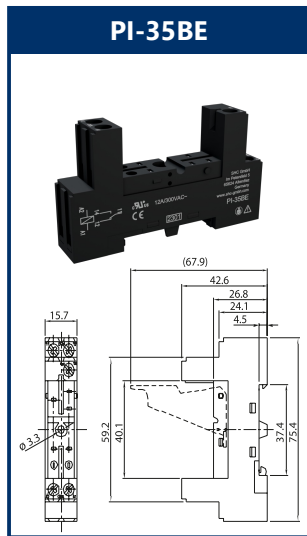


Technical specifications




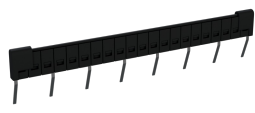
	Screw Terminal	Spring Terminal	Push-In Terminal
Rated Voltage	300 VAC		
Rated Current	12 A		10 A
Dielectric Strength	> 2.500 V _{eff}		
Ambient Temperature	-25..+70 °C		-25..+55 °C
Protection Class	IP20		
Wire Size:			
Solid Wire	2 x 2,5 mm ²	2 x (0,2..1,5) mm ²	1,5 mm ²
Stranded Wire	2 x 2,5 mm ²	2 x (0,2..1,5) mm ²	1,5 mm ²
Connection Sleeves	2 x 1,5 mm ²		
Stripping length	7 mm	7 mm	10 mm
	Torque 0,7 Nm	Pull-out force min. 35 N	

All Sockets including writing tag

Pictures and Drawings

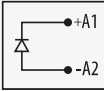
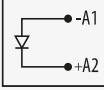
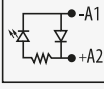
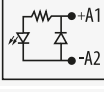


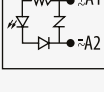
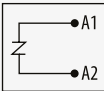
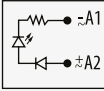
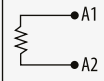


Accessories for Socket PI

BS-16P	BS-1625P	BS-25P	CB-PI-8
			
<ul style="list-style-type: none"> • Plastic Retaining Clip • Relay height: 15,0-16,5 mm 	<ul style="list-style-type: none"> • Plastic Retaining Clip • Relay height: 16,0 and 25,5 mm (PI-Socket with secure electrical insulation) 	<ul style="list-style-type: none"> • Plastic Retaining Clip • Relay height: 25 mm 	<ul style="list-style-type: none"> • Contact Bridge for 8 PI-Sockets

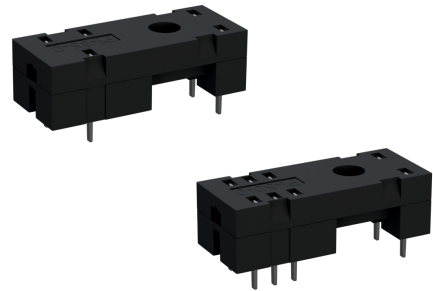
Modul - LM



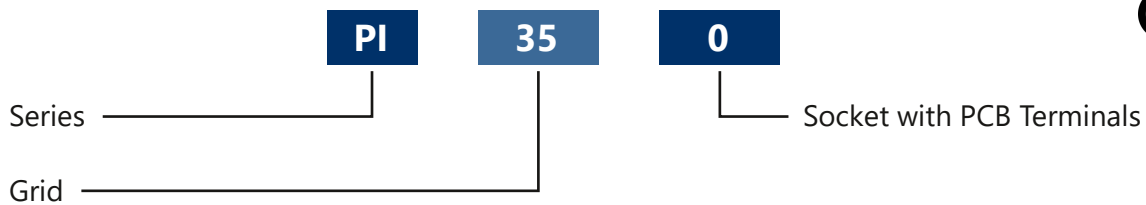
Part number	Description	Specifications	PCB Layout
LM-AB	Diode +A1/-A2	6/230 VDC	
LM-AC	Diode -A1/+A2	6/230 VDC	
LM-BC LM-BD LM-BE	LED red (green LED optional) / Diode -A1/+A2	6/24 VDC 24/60 VDC 110/230 VDC	
LM-CF LM-CG LM-CH	LED red (green LED optional) / Diode +A1/-A2	6/24 VDC 24/60 VDC 110/230 VDC	
LM-DI LM-DJ LM-DKS	RC-Element	6/24 VAC 24/60 VAC 110/230 VAC	
LM-EL LM-EM LM-EN	LED red (green LED optional) / +A1/-A2	6/24 VAC/DC 24/60 VAC/DC 110/230 VAC/DC	
LM-FO LM-FP LM-FQ LM-FR	LED red (green LED optional) / Varistor +A1/-A2	6/24 VAC/DC 24/60 VAC/DC 110/230 VAC/DC 12/48 VAC/DC	
LM-GR LM-GS LM-GT	Varistor	24 VAC 115 VAC 230 VAC	
LM-JV LM-JW LM-JX	LED red (green LED optional) / -A1/+A2	24 VAC 115 VAC 230 VAC	
LM-HU	Resistor	110/230 VAC/DC	

Description

- PCB-Socket for 1- and 2-poles 16-25 mm Relays
- Socket for PCB-Relay
- 3,5 or 5 mm Grid



Ordering information

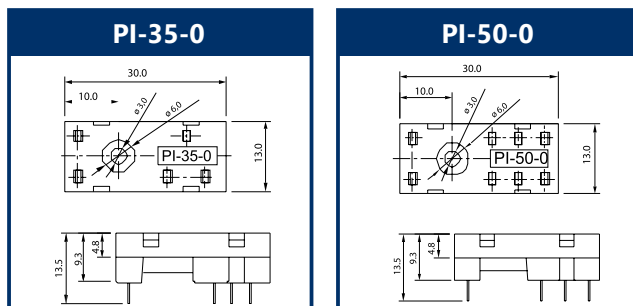


35	Grid 3,5 mm 5 poles for 1-pole Relays
50	Grid 5,0 mm 8 poles for 1- and 2-poles Relays





Technical specifications

Rated Voltage	300 VAC
Rated Current	12 A (/3-P: 10 A)
Dielectric Strength	> 2.500 V _{eff}
Ambient Temperature	-25..+70 °C
Protection Class	IP20

Drawings



Accessories

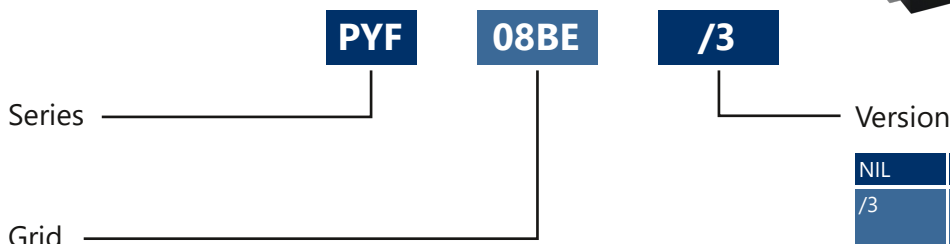
<p>BP-16PS</p>  <ul style="list-style-type: none"> • Plastic Retaining Clip • Relay height: 16 mm 	<p>BP-16MS</p>  <ul style="list-style-type: none"> • Metal Retaining Clip • Relay height: 16 mm 	<p>BP-25PS</p>  <ul style="list-style-type: none"> • Plastic Retaining Clip • Relay height: 25,0-25,5 mm 	<p>BP-25MS</p>  <ul style="list-style-type: none"> • Metal Retaining Clip • Relay height: 25,0-25,5 mm
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Description

- Plug-in Socket for Miniature Relay
- DIN-Rail mount
- 2, 3 or 4 poles Relays
- Screw-, Push-In or Spring Terminals



Ordering information



08BE	8-poles for 2-poles Miniature Relay
11BE	11-poles for 3-poles Miniature Relay
14BE	14-poles for 4-poles Miniature Relay

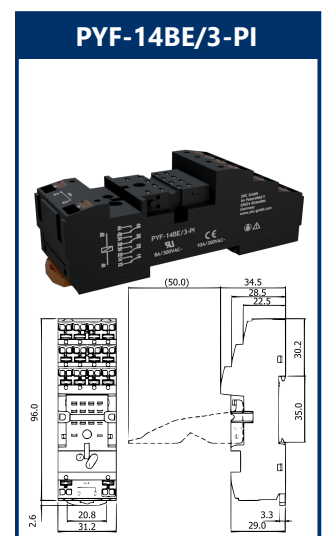
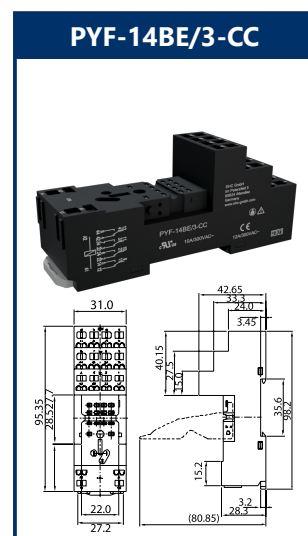
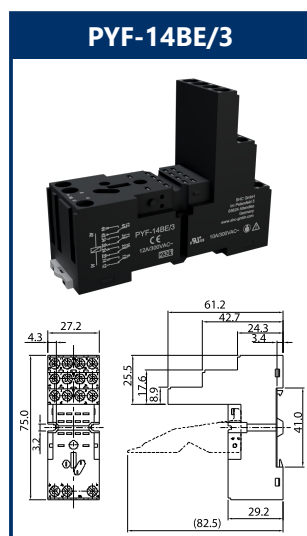
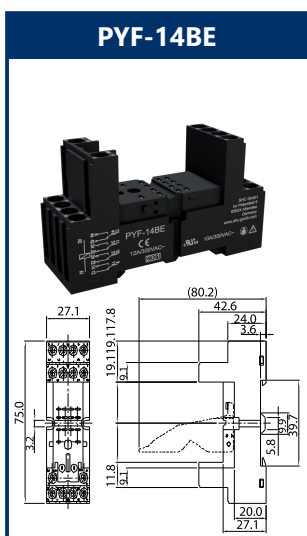
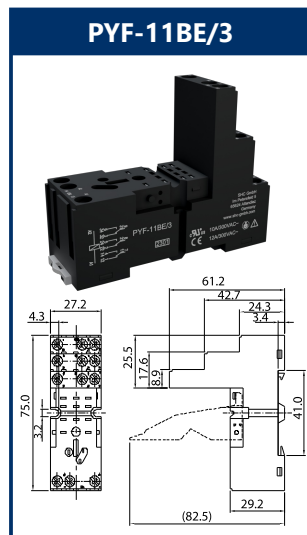
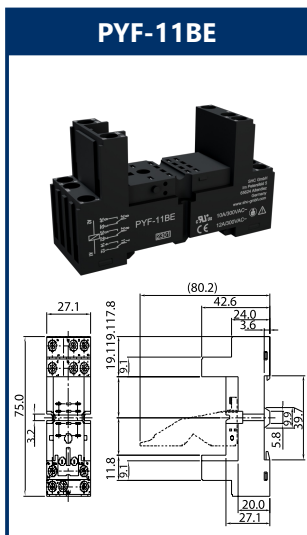
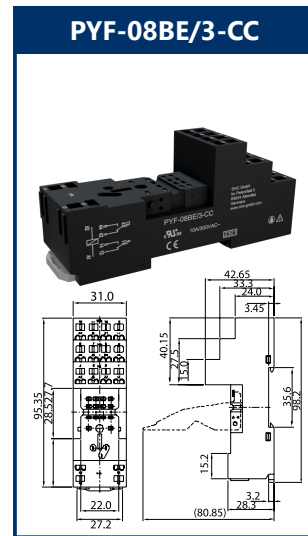
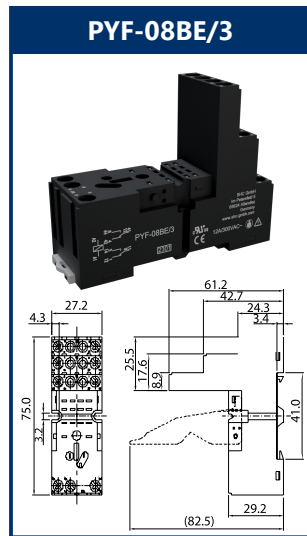
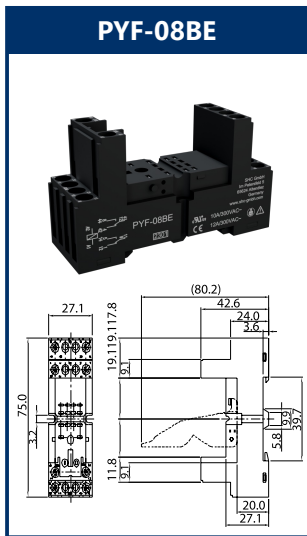
NIL	Screw Terminal
/3	Screw Terminal secure insulation Coil/Contact
/3-CC	Spring Terminal secure insulation Coil/Contact
/3-PI	Push-In Terminal secure insulation Coil/Contact

Technical specifications

	Screw Terminal	Spring Terminal	Push-In Terminal
Rated Voltage	300 VAC		
Rated Current	12 A		10 A
Dielectric Strength	> 2.500 V _{eff}		
Ambient Temperature	-25..+70 °C		-25..+55 °C
Protection Class	IP20		
Wire Size:			
Solid Wire	1 x 4 mm ²	2 x (0,2..1,5) mm ²	1,5 mm ²
Stranded Wire	2 x 2,5 mm ²	2 x (0,2..1,5) mm ²	1,5 mm ²
Connection Sleeves	2 x 1,5 mm ²		
Stripping length	7 mm	7 mm	12 mm
	Torque 0,7 Nm	Pull-out force min. 35 N	

All Sockets including writing tag

Pictures and Drawings



Retaining Clips

BS-36P



- Plastic Retaining Clip for DIN-Rail-Socket
- Relay height: 36 mm

BS-27P



- Plastic Retaining Clip for DIN-Rail-Socket
- Relay height: 27 mm

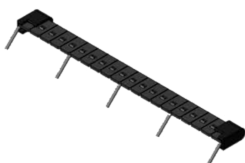
BS-36MS



- Metal Retaining Clip for DIN-Rail-Socket
- Relay height: 36 mm

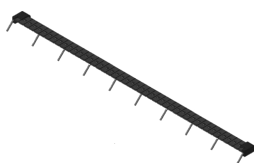
Contact Bridges

CB-PYF-5



- Contact Bridge for 10 PYF Sockets

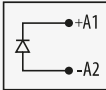
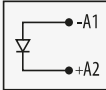
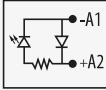
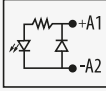
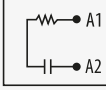
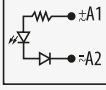
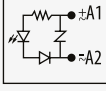
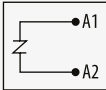
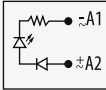
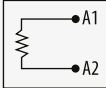
CB-PYF-10



- Contact Bridge for 5 PYF Sockets

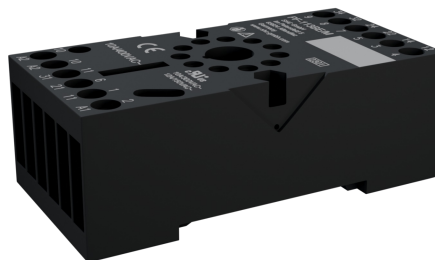
Modul - LM



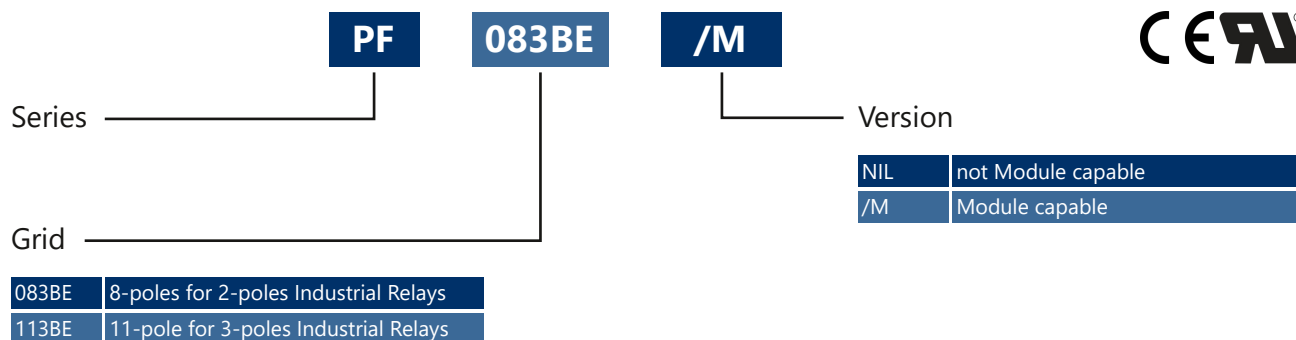
Part number	Description	Specifications	PCB Layout
LM-AB	Diode +A1/-A2	6/230 VDC	
LM-AC	Diode -A1/+A2	6/230 VDC	
LM-BC LM-BD LM-BE	LED red (green LED optional) / Diode -A1/+A2 LED red (green LED optional) / Diode -A1/+A2 LED red (green LED optional) / Diode -A1/+A2	6/24 VDC 24/60 VDC 110/230 VDC	
LM-CF LM-CG LM-CH	LED red (green LED optional) / Diode +A1/-A2 LED red (green LED optional) / Diode +A1/-A2 LED red (green LED optional) / Diode +A1/-A2	6/24 VDC 24/60 VDC 110/230 VDC	
LM-DI LM-DJ LM-DKS	RC-Element RC-Element RC-Element	6/24 VAC 24/60 VAC 110/230 VAC	
LM-EL LM-EM LM-EN	LED red (green LED optional) / +A1/-A2 LED red (green LED optional) / +A1/-A2 LED red (green LED optional) / +A1/-A2	6/24 VAC/DC 24/60 VAC/DC 110/230 VAC/DC	
LM-FO LM-FP LM-FQ LM-FR	LED red (green LED optional) / Varistor +A1/-A2 LED red (green LED optional) / Varistor +A1/-A2 LED red (green LED optional) / Varistor +A1/-A2 LED red (green LED optional) / Varistor +A1/-A2	6/24 VAC/DC 24/60 VAC/DC 110/230 VAC/DC 12/48 VAC/DC	
LM-GR LM-GS LM-GT	Varistor Varistor Varistor	24 VAC 115 VAC 230 VAC	
LM-JV LM-JW LM-JX	LED red (green LED optional) / -A1/+A2 LED red (green LED optional) / -A1/+A2 LED red (green LED optional) / -A1/+A2	24 VAC 115 VAC 230 VAC	
LM-HU	Resistor	110/230 VAC/DC	

Description

- Plug-in Socket with Screw Terminals for 2- and 3-poles Industrial Relay
- DIN-Rail mount
- Module-System available



Ordering information

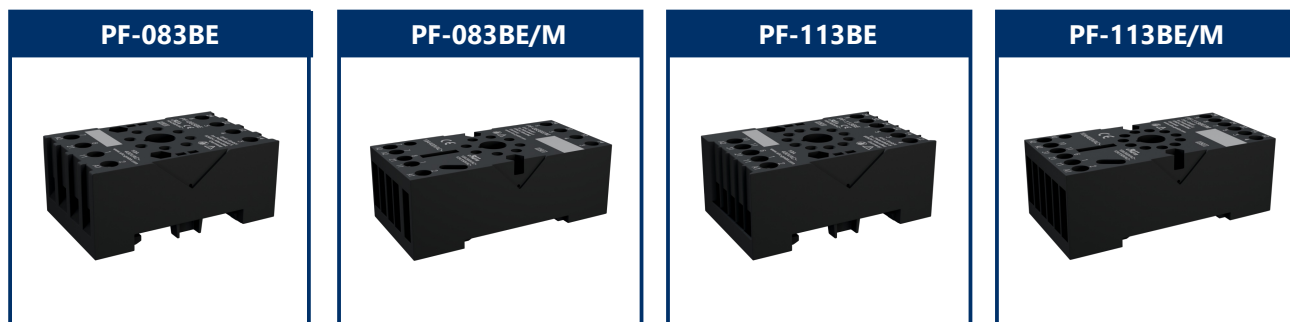


Technical specifications

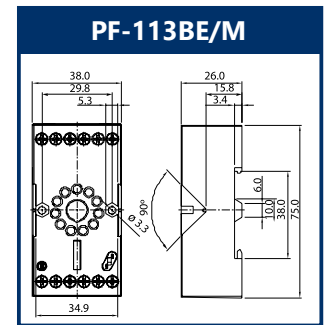
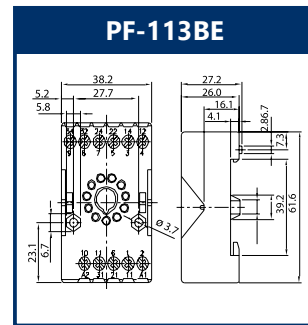
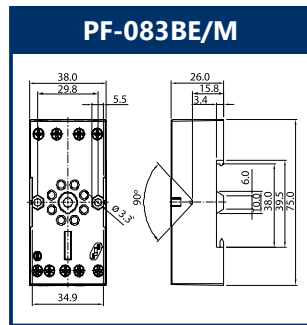
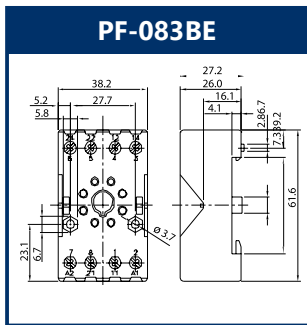
Rated Voltage	300 VAC
Rated Current	12 A (/3-P: 10 A)
Dielectric Strength	> 2.500 V _{eff}
Ambient Temperature	-25..+70 °C
Protection Class	IP20
Terminal Size:	
Solid Wire	2 x 2,5 mm ²
Stranded Wire	2 x 2,5 mm ²
Connection Sleeves	2 x 1,5 mm ²
Stripping length	10 mm
	Torque 0,7 Nm

All Sockets including writing tag

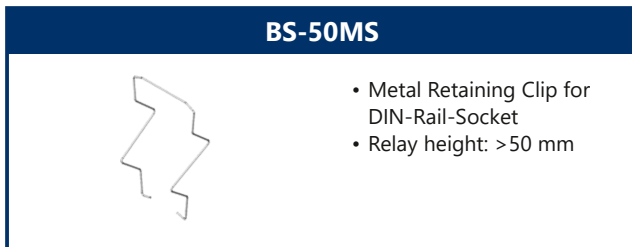
Pictures



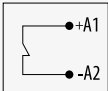
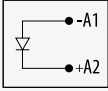
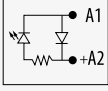
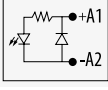
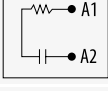
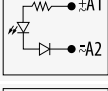
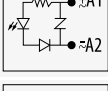
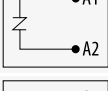
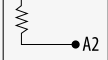
Drawings



Accessories

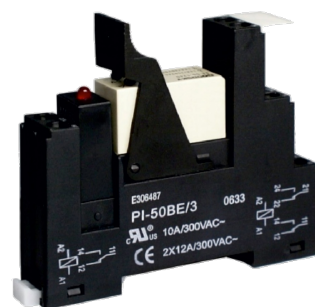


Modul - LLM

Part number	Description	Specifications	PCB Layout
LLM-AB	Diode +A1/-A2	6/230 VDC	
LLM-AC	Diode -A1/+A2	6/230 VDC	
LLM-BC	LED red (LED green optional) / Diode -A1/+A2	6/24 VDC	
LLM-BD	LED red (LED green optional) / Diode -A1/+A2	48/60 VDC	
LLM-BE	LED red (LED green optional) / Diode -A1/+A2	110/230 VDC	
LLM-CF	LED red (LED green optional) / Diode +A1/-A2	6/24 VDC	
LLM-CG	LED red (LED green optional) / Diode +A1/-A2	48/60 VDC	
LLM-CH	LED red (LED green optional) / Diode +A1/-A2	110/230 VDC	
LLM-DI	RC-Element	6/24 VAC	
LLM-DJ	RC-Element	48/60 VAC	
LLM-DK	RC-Element	110/230 VAC	
LLM-EL	LED red (LED green optional) / +A1/-A2	6/24 VAC/DC	
LLM-EM	LED red (LED green optional) / +A1/-A2	48/60 VAC/DC	
LLM-EN	LED red (LED green optional) / +A1/-A2	110/230 VAC/DC	
LLM-FO	LED red (LED green optional) / Varistor +A1/-A2	6/24 VAC/DC	
LLM-FP	LED red (LED green optional) / Varistor +A1/-A2	48/60 VAC/DC	
LLM-FQ	LED red (LED green optional) / Varistor +A1/-A2	110/230 VAC/DC	
LLM-GR	Varistor	24 VAC	
LLM-GS	Varistor	115 VAC	
LLM-GT	Varistor	230 VAC	
LLM-HU	Resistor	110/230 VAC/DC	

Description

- 16 mm Interface Relay
- 1-poles 16 A o 2-poles 8 A



Ordering information

SHC1 1 3 S A115 R 01 AU

15.6mm Interface Relay

No. of Contacts

1	1 CO, 1-pole
2	2 CO, 2-poles

Socket Type

2	2 - tiers
3	3 - tiers ^(*)

Terminal Type

S	Screw Terminals
C	Spring Terminals
PI	Push-In Terminals

*1: Secure electrical insulation according to VDE 0106, EN 50178 and EN 60204
*2: for DC + FLD (+A1), for AC + Varistor

Contact material

NIL	AgNi
AU	AgNi + AU plated

Relay Brand

01	TE
04	Alternativ

LED Color

R	Red ^(*)
G	Green ^(*)
NIL	no LED

Coil voltage

D12	12 VDC
D24	24 VDC
A24	24 VAC, 50/60 Hz
A115	115 VAC, 50/60 Hz
A230	230 VAC, 50/60 Hz

Technical specifications

Relay	1-pole	2-poles
Contact Configuration	1CO	2CO
Rated Voltage	250 VAC	
Rated Current	16 A	2 x 8 A
Rated Power (cos phi = 1)	4.000 VA	2.000 VA
Min. Switching Capacity	5 VDC / 10 mA	
Contact material	AgNi / AgNi+Au / AgSnO ^(*)	
Dielectric Strength Coil / Contact	5.000 V _{eff}	
Dielectric Strength open Contacts	5.000 V _{eff}	
Clearance and Creepage	> 10 mm / > 8 mm ^(*)	
Mechanical endurance	> 10 x 10 ⁶	
Electrical endurance	1 x 10 ⁵	
Ambient Temperature	-40 .. +85 °C	
Approvals	VDE, UL, CSA	
Coil voltage	12 VDC, 24 VDC, 24 VAC, 115 VAC, 230 VAC	
Coil Power	0,4 W / 0,75 VA	

*1: for alternative Relay Brand

Socket	Screw Terminal	Spring Terminal	Push-In Terminal
Rated Voltage	300 VAC		
Rated Current	1-pole: 1 x 12 A, 2-poles: 2 x 10 A		
Dielectric Strength Coil/Contact	> 2.500 V _{eff}		
Clearance and Creepage Coil/Cont.	> 4 / 4 mm	> 8 / 8 mm	
Ambient Temperature	-25..+70 °C		-25..+55 °C
Protection Class	IP20		
Flammability Class UL 94	V-0		
Predection against acc. contact	VBG 4		
Wire Size:			
Solid Wire	2 x 2,5 mm ²	2 x (0,2..1,5) mm ²	1,5 mm ²
Stranded Wire	2 x 2,5 mm ²		1,5 mm ²
Connection Sleeves	2 x 1,5 mm ²	2 x (0,2..1,5) mm ²	
	Torque 0,7 Nm		
Approvals	UL		

Preferred parts

Part number	Description
SHC113SD24G01	Interface Relay, 1-pole, 16 A, 24 VDC, LED+Diode, green, +A1, Screw Terminal
SHC113SA230R01	Interface Relay, 1-pole, 16 A, 230 VAC, LED, red + Var., Screw Terminal
SHC123SD24G01	Interface Relay, 2-poles, 8 A, 24 VDC, LED, +A1, Screw Terminal
SHC123SA230R01	Interface Relay, 2-poles, 8 A, 230 VAC, LED, red + Var., Screw Terminal
SHC113CD24G01	Interface Relay, 1-pole, 16 A, 24 VDC, LED+Diode, green, +A1, Spring Terminal
SHC113CA230R01	Interface Relay, 1-pole, 16 A, 230 VAC, LED, red + Var., Spring Terminal
SHC123CD24G01	Interface Relay, 2-poles, 8 A, 24 VDC, LED, +A1, Spring Terminal
SHC123CA230R01	Interface Relay, 2-poles, 8 A, 230 VAC, LED, red + Var., Spring Terminal

Accessories





Series SHC2

Interface Relays (27,1 mm electromechanical Relays)

Description

- 27,1 mm Interface Relay
- 2-poles 12 A, 3-poles 10 A or 4-poles 6 A



Ordering information

SHC2 2 3 S A115 R 01 AU

27,1 mm Interface Relay

No. of Contacts

2	2 CO, 2-poles
3	3 CO, 3-poles
4	4 CO, 4-poles

Socket Type

2	2 - tiers
3	3 - tiers ^(*)

Terminal Type

S	Screw Terminals
C	Spring Terminals
PI	Push-In Terminals

Contact material

NIL	AgNi
AU	AgNi + AU plated

Internal Code

LED Color

R	Red ^(*)
G	Green ^(*)
leer	no LED

Coil voltage

D12	12 VDC
D24	24 VDC
A24	24 VAC, 50/60 Hz
A115	115 VAC, 50/60 Hz
A230	230 VAC, 50/60 Hz

*1: Secure electrical insulation according to VDE 0106, EN 50178 and EN 60204
 *2: for DC + FLD (+A1), for AC + Varistor

Technical specifications

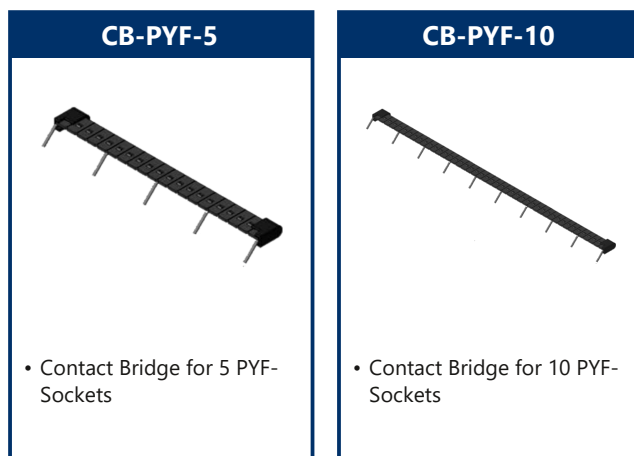
Relay	2-poles	3-poles	4-poles
Contact Configuration	2CO	3CO	4CO
Rated Voltage		250 VAC	
Rated Current	12 A	10 A	6 A
Rated Power (cos phi = 1)	3.000 VA	2.500 VA	1.500 VA
Min. Switching Capacity		5 VDC / 10 mA	
Contact material		AgNi / AgNi+Au	
Dielectric Strength Coil/Contact		1.500 V _{eff}	
Dielectric Strength adjacent cont.		1.500 V _{eff}	
Dielectric Strength open Contacts		1.000 V _{eff}	
Mechanical endurance		> 10 x 10 ⁶	
Electrical endurance		1 x 10 ⁶	
Ambient Temperature		-40 .. +70 °C	
Approvals		VDE, UL, CSA	
Coil voltage	12 VDC, 24 VDC, 24 VAC, 115VAC, 230 VAC		
Coil Power	0,9 W / 1,0 VA		

Socket	Screw Terminal	Spring Terminal	Push-In Terminal
Rated Voltage	300 VAC		
Rated Current	12 A		10 A
Dielectric Strength Coil/Contact	> 2.500 V _{eff}		
Clearance and Creepage Coil/Contact:			
2-poles	> 3 / 4 mm		-
3-poles	> 2,6 / 4 mm		-
4-poles	> 1,8 / 3 mm		> 3 / 4 mm
Ambient Temperature	-25..+70 °C		-25..+55 °C
Protection Class	IP20		
Flammability Class UL 94	V-0		
Predection against acc. contact	VBG 4		
Wire Size:			
Solid Wire	1 x 4 mm ² / 2 x 2,5 mm ²	2 x (0,2..1,5) mm ²	1,5 mm ²
Stranded Wire	2 x 2,5 mm ²		1,5 mm ²
Connection Sleeves	2 x 1,5 mm ²	2 x (0,2..1,5) mm ²	
	Torque 0,7 Nm		
Approvals	UL		

Preferred parts

Part number	Description
SHC242SD24G01	Interface Relay, 4-poles, 6 A, 24 VDC, LED, +A1, Spring Terminal
SHC242SA230R01	Interface Relay, 4-poles, 6 A, 230 VAC, LED, red + Var., Spring Terminal
SHC243SD24G01	Interface Relay, 4-poles, 6 A, 24 VDC, LED, +A1, Screw Terminal
SHC243SA230R01	Interface Relay, 4-poles, 6 A, 230 VAC, LED, red + Var., Screw Terminal
SHC243CD24G01	Interface Relay, 4-poles, 6 A, 24 VDC, LED, +A1, Spring Terminal
SHC243CA230R01	Interface Relay, 4-poles, 6 A, 230 VAC, LED, red + Var., Spring Terminal

Accessories





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