

# ESB40-40-230AC/DC



Products → Low Voltage Products and Systems → Control Products → Contactors → Installation Contactors

Products → Low Voltage Products and Systems → Modular DIN Rail Products → Modular DIN Rail Components MDRCs → Installation Contactors

## General Information

<b>Extended Product Type:</b>	ESB40-40-230AC/DC
<b>Product ID:</b>	GHE3491102R0006
<b>EAN:</b>	4013614084867
<b>Catalog Description:</b>	ESB40-40-230AC/DC Installation Contactor
<b>Long Description:</b>	The ESB40 installation contactor is a 4 pole contactor suitable for modular switchboards. They are specially designed fitting to modular DIN rail products and for applications where customers want to use the panel design with high finger protection. Installation contactors are used in residential, commercial and industrial applications for the control of single or three-phase loads up to 40 A or switching of control signals. Further features are the noiseless and hum-free DC coil, the integrated overvoltage protection up to 5 kV and a switch position indication. Auxiliary contacts, distance pieces and sealing cover for protection against unauthorized changes are available as accessory.

## Additional Information

<b>Ambient Air Temperature:</b>	Operation -25 ... +55 °C Storage -40 ... +80 °C
<b>Ampere Rating UL/CSA:</b>	21 A
<b>BV Certificate:</b>	1SAA920000-0204
<b>Built-In Depth (t<sub>2</sub>):</b>	58 mm
<b>CB Certificate:</b>	1SAA920001-2003
<b>CCC Certificate:</b>	1SAA920000-3804
<b>CEBEC Certificate:</b>	1SAA920001-2001
<b>Coil Consumption:</b>	Average Holding Value 50 Hz 5 V·A Average Pull-in Value 50 Hz 5 V·A
<b>Coil Operating Limits:</b>	(acc. to IEC 60947-4-1) 0.85 ... 1.1 x U <sub>c</sub> (at θ ≤ 55 °C)
<b>Connecting Capacity Control Circuit:</b>	Rigid 1/2x 1 ... 4 mm <sup>2</sup> Rigid 2x 2.5 mm <sup>2</sup>
<b>Connecting Capacity Control Circuit UL/CSA:</b>	Stranded 16-10 AWG
<b>Connecting Capacity Main Circuit:</b>	Flexible with Ferrule 1x 1.5 ... 16 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 1.5 ... 16 mm <sup>2</sup> Flexible 1x 1.5 ... 16 mm <sup>2</sup> Rigid 1x 1.5 ... 25 mm <sup>2</sup> Rigid 2x 10 mm <sup>2</sup>
<b>Connecting Capacity Main Circuit UL/CSA:</b>	Stranded 16-4 AWG
<b>Country of Origin:</b>	Germany (DE)
<b>Customs Tariff Number:</b>	85365080
<b>DNV Certificate:</b>	1SAA920000-0305
<b>Declaration of Conformity - CE:</b>	1SAD938509-0007_
<b>Degree of Protection:</b>	IP20
<b>Drop-out Voltage in % of U<sub>c</sub>:</b>	10 ... 75
<b>E-number:</b>	3225054
<b>EAC Certificate:</b>	1SAA920000-2702
<b>EAN:</b>	4013614084867
<b>EPLAN Catalog Tree:</b>	Electrical engineering / Relays, contactors / Contactors
<b>ETIM 4:</b>	EC001653 - Installation contactor for distribution board
<b>ETIM 5:</b>	FC001653 - Installation contactor for distribution board

ETIM 6:	EC001653 - Installation contactor for distribution board
Electrical Durability:	AC-1 150000 cycle AC-3 170000 cycle AC-7a 150000 cycle AC-7b 170000 cycle
Environmental Information:	1SAA920002-2401
Frequency (f):	40 ... 450 Hz
Full Load Amps Motor Use:	(220 ... 240 V AC) Single Phase 22 A (440 ... 480 V AC) Three Phase 21 A
Fuse Type:	Class K5 - 40 A
GL Certificate:	1SAA920000-0403
General Use Rating UL/CSA:	(acc. to UL 480 V) 40 A
Horsepower Rating UL/CSA:	(220 ... 240 V AC) Single Phase 7.5 Hp (440 ... 480 V AC) Three Phase 15 Hp
IIT Publishing Status:	Level 0 - Information enabled
Industrial IT Certification Level:	0
Instructions and Manuals:	2CDC103025M6801
Invoice Description:	ESB40-40-230AC/DC Inst.-contactor 4NO 230V
KC Certificate:	1SAA920001-1501
Maximum Electrical Switching Frequency:	AC-1 300 cycles per hour AC-3 600 cycles per hour AC-7a 300 cycles per hour AC-7b 600 cycles per hour
Maximum Electrical Switching Frequency UL/CSA:	General Use 300 cycles per hour Motor Use 600 cycles per hour
Maximum Operating Altitude Permissible:	2000 m
Maximum Operating Voltage UL/CSA:	Main Circuit 480 V AC
Mechanical Durability:	1000000 cycle
Minimum Order Quantity:	1 piece
Mounting Position:	Position 1 to 5
Mounting on DIN Rail:	TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
NF Certificate:	1SAA920000-1202
Number of Auxiliary Contacts NC:	0
Number of Auxiliary Contacts NO:	0
Number of Main Contacts NC:	0
Number of Main Contacts NO:	4
Number of Poles:	4
Object Classification Code:	Q
Operating Frequency (f <sub>sw</sub> ):	40 ... 450 Hz
Package Level 1 EAN:	4013614421082
Package Level 1 Gross Weight:	1.26 kg
Package Level 1 Height:	69 mm
Package Level 1 Length:	165 mm
Package Level 1 Units:	3 piece
Package Level 1 Width:	89 mm
Pollution Degree:	3
Power Loss:	at Rated Operating Conditions per Pole 4 W
Product Main Type:	ESB40
Product Name:	Installation Contactor
Product Net Depth:	65 mm

<b>Product Net Height:</b>	85 mm
<b>Product Net Weight:</b>	0.405 kg
<b>Product Net Width:</b>	54 mm
<b>RMRS Certificate:</b>	1SAA920000-0704
<b>Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1:</b>	8 x I <sub>e</sub> / AC-3
<b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>	230 V
<b>Rated Frequency (f):</b>	Control Circuit DC Control Circuit 50 Hz Control Circuit 60 Hz Control Circuit 400 Hz Main Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz
<b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>	6 kV
<b>Rated Insulation Voltage (U<sub>i</sub>):</b>	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 500 V
<b>Rated Making Capacity AC-3 acc. to IEC 60947-4-1:</b>	10 x I <sub>e</sub> / AC-3
<b>Rated Operational Current AC-1 (I<sub>e</sub>):</b>	(NC) 30 A (NO) 40 A
<b>Rated Operational Current AC-3 (I<sub>e</sub>):</b>	(230 V) Single Phase 22 A (400 V) Three Phase 22 A
<b>Rated Operational Current AC-7a (I<sub>e</sub>):</b>	(NC) 30 A (NO) 40 A
<b>Rated Operational Current AC-7b (I<sub>e</sub>):</b>	(230 V) Single Phase 22 A (400 V) Three Phase 22 A
<b>Rated Operational Power AC-1 (P<sub>e</sub>):</b>	(230 V) Single Phase 9.2 kW (400 V) Single Phase 26 kW
<b>Rated Operational Power AC-3 (P<sub>e</sub>):</b>	(230 V) Single Phase 3.7 kW (400 V) Three Phase 11 kW
<b>Rated Operational Power AC-7a (P<sub>e</sub>):</b>	(230 V) Single Phase 9.2 kW (400 V) Three Phase 26 kW
<b>Rated Operational Power AC-7b (P<sub>e</sub>):</b>	(230 V) Single Phase 3.7 kW (400 V) Three Phase 11 kW
<b>Rated Operational Voltage:</b>	Main Circuit 220 V DC Main Circuit 400 V AC
<b>Rated Short-time Withstand Current (I<sub>cw</sub>):</b>	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 176 A
<b>Recommended Screw Driver:</b>	Control Circuit Pozidriv 1 Main Circuit Pozidriv 2
<b>Remarks:</b>	Installation contactor, noiseless/humfree, high insulation, reliable function, long life
<b>Resistance to Shock acc. to IEC 60068-2-27:</b>	11 ms Pulse 15g
<b>Resistance to Vibrations acc. to IEC 60068-2-6:</b>	5g / 3 ... 150 Hz
<b>RoHS Date:</b>	0456
<b>RoHS Information:</b>	1SAD938509-0007_
<b>RoHS Status:</b>	Following EU Directive 2011/65/EC
<b>Selling Unit of Measure:</b>	piece
<b>Short Description:</b>	ESB40-40-230AC/DC Inst.-contactor 4NO
<b>Short-Circuit Protective Devices:</b>	gG Type Fuses 63 A
<b>Standards:</b>	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 IEC/EN 61095

UL 60947-1  
UL 60947-4-1

<b>Terminal Type:</b>	Screw Terminals
<b>Tightening Torque:</b>	Control Circuit 0.9 N·m Main Circuit 2.5 N·m
<b>Tightening Torque UL/CSA:</b>	Control Circuit 8 in·lb Main Circuit 20 in·lb
<b>UNSPSC:</b>	39121529
<b>Utilization Category:</b>	AC-1 AC-3 AC-7a AC-7b
<b>Width in Number of Modular Spacings:</b>	3
<b>Wire Stripping Length:</b>	Control Circuit 7 mm Main Circuit 13 mm
<b>cUL Certificate:</b>	cUL E191658
<b>eClass:</b>	7.0 27142308

