

# ESB24-40-230AC/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>	ESB24-40-230AC/DC
<b>Product ID:</b>	GHE3291102R0006
<b>EAN:</b>	4013614084454
<b>Catalog Description:</b>	ESB24-40-230AC/DC Installation Contactor
<b>Long Description:</b>	The ESB24 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 24 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>	7.6 A
<b>BV Certificate:</b>	1SAA920000-0204
<b>Built-In Depth (t<sub>2</sub>):</b>	58 mm
<b>CB Certificate:</b>	1SAA920000-2003
<b>CCC Certificate:</b>	1SAA920000-3804
<b>Coil Consumption:</b>	Average Holding Value 50 Hz 4 V·A Average Pull-in Value 50 Hz 4 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 UL/CSA:</b>	Stranded 16-10 AWG
<b>Connecting Capacity Main Circuit UL/CSA:</b>	Stranded 16-8 AWG
<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 Main Circuit:</b>	Flexible with Ferrule 1x 1.5 ... 10 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 1.5 ... 10 mm <sup>2</sup> Flexible 1x 1.5 ... 10 mm <sup>2</sup> Rigid 1x 1.5 ... 10 mm <sup>2</sup> Rigid 2x 4 mm <sup>2</sup>
<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>	1SAD938508-0007
<b>Degree of Protection:</b>	IP20
<b>Drop-out Voltage in % of U<sub>c</sub>:</b>	10 ... 75
<b>E-number:</b>	3225024
<b>EAC Certificate:</b>	1SAA920000-2702
<b>EAN:</b>	4013614084454
<b>EPLAN Catalog Tree:</b>	Electrical engineering / Relays, contactors / Contactors
<b>ETIM 4:</b>	EC001653 - Installation contactor for distribution board
<b>ETIM 5:</b>	EC001653 - Installation contactor for distribution board
<b>ETIM 6:</b>	FC001653 - Installation contactor for distribution board

	ESB24-40 Installation Contactor for distribution board
<b>Electrical Durability:</b>	AC-1 150000 cycle AC-3 500000 cycle AC-7a 150000 cycle AC-7b 500000 cycle
<b>Environmental Information:</b>	1SAA920002-2401
<b>Frequency (f):</b>	40 ... 450 Hz
<b>Full Load Amps Motor Use:</b>	(220 ... 240 V AC) Single Phase 9.6 A (440 ... 480 V AC) Three Phase 7.6 A
<b>Fuse Type:</b>	Class K5 - 25 A
<b>GL Certificate:</b>	1SAA920000-0403
<b>GOST Certificate:</b>	1SAA920000-2701
<b>General Use Rating UL/CSA:</b>	(acc. to UL 240 V) 24 A (acc. to UL 480 V) 24 A
<b>Horsepower Rating UL/CSA:</b>	(220 ... 240 V AC) Single Phase 3 Hp (440 ... 480 V AC) Three Phase 5 Hp
<b>IT Publishing Status:</b>	Level 0 - Information enabled
<b>Industrial IT Certification Level:</b>	0
<b>Instructions and Manuals:</b>	2CDC103025M6801
<b>Invoice Description:</b>	ESB24-40-230AC/DC Inst.-contactor 4NO 230-240V
<b>Maximum Electrical Switching Frequency:</b>	AC-1 300 cycles per hour AC-3 600 cycles per hour AC-7a 300 cycles per hour AC-7b 600 cycles per hour
<b>Maximum Electrical Switching Frequency UL/CSA:</b>	General Use 300 cycles per hour Motor Use 600 cycles per hour
<b>Maximum Operating Altitude Permissible:</b>	2000 m
<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 480 V AC
<b>Mechanical Durability:</b>	1000000 cycle
<b>Minimum Order Quantity:</b>	1 piece
<b>Mounting Position:</b>	Position 1 to 5
<b>Mounting on DIN Rail:</b>	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
<b>Number of Auxiliary Contacts NC:</b>	0
<b>Number of Auxiliary Contacts NO:</b>	0
<b>Number of Main Contacts NC:</b>	0
<b>Number of Main Contacts NO:</b>	4
<b>Number of Poles:</b>	4
<b>Object Classification Code:</b>	Q
<b>Package Level 1 EAN:</b>	4013614420337
<b>Package Level 1 Gross Weight:</b>	1.22 kg
<b>Package Level 1 Height:</b>	69 mm
<b>Package Level 1 Length:</b>	183 mm
<b>Package Level 1 Units:</b>	5 piece
<b>Package Level 1 Width:</b>	89 mm
<b>Pollution Degree:</b>	3
<b>Power Loss:</b>	at Rated Operating Conditions per Pole 3 W
<b>Product Main Type:</b>	ESB24
<b>Product Name:</b>	Installation Contactor
<b>Product Net Depth:</b>	65 mm
<b>Product Net Height:</b>	85 mm
<b>Product Net Weight:</b>	0.235 kg

<b>Product Net Width:</b>	36 mm
<b>RMRS Certificate:</b>	1SAA920000-0703
<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 ... 240 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) 24 A (NO) 24 A
<b>Rated Operational Current AC-3 (I<sub>e</sub>):</b>	(230 V) Single Phase 9 A (400 V) Three Phase 9 A
<b>Rated Operational Current AC-7a (I<sub>e</sub>):</b>	(NC) 24 A (NO) 24 A
<b>Rated Operational Current AC-7b (I<sub>e</sub>):</b>	(230 V) Single Phase 9 A (400 V) Three Phase 9 A
<b>Rated Operational Power AC-1 (P<sub>e</sub>):</b>	230 V Single Phase 5.5 kW 400 V Three Phase 16 kW
<b>Rated Operational Power AC-3 (P<sub>e</sub>):</b>	(230 V) Single Phase 1.3 kW (400 V) Three Phase 4 kW
<b>Rated Operational Power AC-7a (P<sub>e</sub>):</b>	(230 V) Single Phase 5.5 kW (400 V) Three Phase 16 kW
<b>Rated Operational Power AC-7b (P<sub>e</sub>):</b>	(230 V) Single Phase 1.3 kW (400 V) Three Phase 4 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 72 kA
<b>Recommended Screw Driver:</b>	Control Circuit Pozidriv 1 Main Circuit Pozidriv 1
<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>	1SAA920005-4401
<b>RoHS Status:</b>	Following EU Directive 2002/95/EC August 18, 2005 and amendment
<b>Selling Unit of Measure:</b>	piece
<b>Short Description:</b>	ESB24-40-230AC/DC Inst.-contactor 4NO
<b>Short-Circuit Protective Devices:</b>	gG Type Fuses 35 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 1 N·m
<b>Tightening Torque UL/CSA:</b>	Control Circuit 8 in·lb Main Circuit 9 in·lb
<b>Utilization Category:</b>	AC-1 AC-3 AC-7a AC-7b
<b>Width in Number of Modular Spacings:</b>	2
<b>Wire Stripping Length:</b>	Control Circuit 7 mm Main Circuit 10 mm
<b>cUL Certificate:</b>	cUL E191658
<b>eClass:</b>	7.0 27142308

