PRODUCT-DETAILS

ESB40-31N-01

ESB40-31N-01 Installation Contactor (NC) 30 A - 3 NO - 1 NC - 24 V - Control Circuit 400 Hz



General Information

Extended Product Type	ESB40-31N-01
Product ID	1SAE341111R0131
EAN	4013614518317
Catalog Description	ESB40-31N-01 Installation Contactor (NC) 30 A - 3 NO - 1 NC - 24 V - Control Circuit 400 Hz
Long Description	The ESB40..N installation contactors are used to control single and three-phase loads up to 40 A and can be operated by AC or DC. These contactors are made for use in household applications as well as in industrial environments. The following benefits are provided: Hum-free operation, low power consumption and integrated overvoltage protection. Various contact combinations and accessories are available.

Ordering

Package Level 1 EAN	4013614524622
Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

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Popular Downloads

Data Sheet, Technical Information	2CDC103051C0201
Instructions and Manuals	2CDC103043M6801
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	54 mm
Product Net Height	85 mm
Product Net Depth / Length	65 mm
Product Net Weight	0.405 kg

Technical

Rated Operational Voltage	Main Circuit 220 V DC Main Circuit 400 V AC
Rated Control Circuit Voltage (U_c)	24 V
Rated Frequency (f)	Control Circuit 400 Hz Control Circuit 50 Hz Control Circuit 60 Hz Control Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz Main Circuit DC
Rated Operational Current AC-1 (I_e)	(NC) 30 A (NO) 40 A
Rated Operational Current AC-3 (I_e)	(230 V) Single Phase, NO 22 A (400 V) Three Phase, NO 22 A
Rated Operational Power AC-1 (P_e)	(230 V) Single Phase, NC 6.9 kW (230 V) Single Phase, NO 9.2 kW (400 V) Three Phase, NO 27.7 kW
Rated Operational Power AC-3 (P_e)	(230 V) Single Phase, NO 3.7 kW (400 V) Three Phase, NO 11 kW
Rated Operational Current AC-7a (I_e)	(NO) 40 A
Rated Operational Power AC-7a (P_e)	(230 V) Single Phase, NC 6.9 kW (230 V) Single Phase, NO 9.2 kW (400 V) Three Phase, NO 27.7 kW
Rated Operational Current AC-7b (I_e)	(230 V) Single Phase, NO 22 A (400 V) Three Phase, NO 22 A
Rated Operational Power AC-7b (P_e)	(230 V) Single Phase, NO 3.7 kW (400 V) Three Phase, NO 11 kW
Recommended Screw Driver	Control Circuit Pozidriv 1 Main Circuit Pozidriv 2
Rated Impulse Withstand Voltage (U_{imp})	6 kV
Rated Insulation Voltage (U_i)	500 V
Connecting Capacity Main Circuit	Flexible with Ferrule 1x 1.5 ... 16 mm² Flexible with Ferrule 2x 1.5 ... 10 mm² Flexible with Insulated Ferrule 1x 1.5 ... 16 mm² Flexible with Insulated Ferrule 2x 1.5 ... 10 mm² Flexible 1x 1.5 ... 16 mm² Flexible 2x 1.5 ... 10 mm²

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	Rigid 1x 1.5 ... 25 mm² Rigid 2x 1.5 ... 10 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm² Flexible with Ferrule 2x 0.75 ... 1.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1 mm² Flexible 1x 1 ... 4.0 mm² Flexible 2x 1 ... 2.5 mm² Rigid 1x 1 ... 4 mm² Rigid 2x 1 ... 2.5 mm²
Tightening Torque	Control Circuit 0.9 N·m Main Circuit 2.5 N·m
Wire Stripping Length	Control Circuit 7 mm Main Circuit 13 mm
Degree of Protection	IP20
Electrical Durability	AC-1 (NC) 70000 cycle AC-1 (NO) 150000 cycle AC-3 (NO) 100000 cycle AC-7a (NC) 70000 cycle AC-7a (NO) 150000 cycle AC-7b (NO) 100000 cycle
Mechanical Durability	1000000 cycle
Number of Poles	4P
Number of Auxiliary Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Main Contacts NC	1
Number of Main Contacts NO	3
Width in Number of Modular Spacings	3.0
Pollution Degree	3
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 61095 UL 60947-1 UL 60947-4-1 IEC 60335-2-40 A2L

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 480 V AC
Horsepower Rating UL/CSA	(220 ... 240 V AC) Single Phase, NC 3 Hp (220 ... 240 V AC) Single Phase, NO 3 Hp (220 ... 240 V AC) Three Phase, NO 7.5 Hp (440 ... 480 V AC) Single Phase, NC 7.5 Hp (440 ... 480 V AC) Single Phase, NO 7.5 Hp (440 ... 480 V AC) Three Phase, NO 15 Hp
Connecting Capacity Main Circuit UL/CSA	Solid 16-4 AWG Stranded 16-4 AWG
Connecting Capacity Control Circuit UL/CSA	Solid 16-10 AWG Stranded 16-10 AWG
Tightening Torque UL/CSA	Control Circuit 8 in·lb Main Circuit 20 in·lb

Environmental

Ambient Air Temperature	Operation -25 ... +55 °C Storage -40 ... +80 °C

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Maximum Operating Altitude Permissible	2000 m
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 15g
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Consumer
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

ABB EcoSolutions

End of Life Instructions	1SBC100156C0267

Certificates and Declarations

A2L Certificate – IEC	1SAA920000-4601
ABS Certificate	1SAA920000-0101
CB Certificate	1SAA920005-2001
CQC Certificate	CQC2017010304993562 CQC2017010304993563
Declaration of Conformity - CCC	2020980304001310 2020980304001313
Declaration of Conformity - CE	1SAD101100-3301
Declaration of Conformity - UKCA	1SAD201100-3301
DNV Certificate	1SAA920000-0306
EAC Certificate	1SAA920001-2702
RINA Certificate	1SAA920000-0801
RMRS Certificate	1SAA920000-0705
UL Certificate	E191658-19960301

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	92 mm
Package Level 1 Height	69.5 mm
Package Level 1 Depth / Length	57 mm
Package Level 1 Gross Weight	0.405 kg
Package Level 2 Units	32 piece
Package Level 2 Width	280 mm
Package Level 2 Height	210 mm
Package Level 2 Depth /	395 mm

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Length	
Package Level 2 Gross Weight	12.96 kg
Package Level 2 EAN	4013614539015

Classifications

Object Classification Code	Q
ETIM 5	EC001653 - Installation contactor for distribution board
ETIM 6	EC001653 - Installation contactor for distribution board
ETIM 7	EC001653 - Installation contactor for distribution board
eClass	V11.0 : 27142308
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4759 >> Installation contactor for distribution board
E-Number (Finland)	3707584
ETIM 8	EC001653 - Installation contactor for distribution board

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
1SAE901901R1011	EH04-11N Auxiliary Contact - 0 NO - 0 NC - Auxiliary Circuit 50 Hz	EH04-11N	1	piece
1SAE901901M1011	EH04-11N Auxiliary Contact - 0 NO - 0 NC - Auxiliary Circuit 50 Hz	EH04-11N	1	piece
1SAE901901R1020	EH04-20N Auxiliary Contact - 0 NO - 0 NC - Auxiliary Circuit 50 Hz	EH04-20N	1	piece
1SAE901901M1020	EH04-20N Auxiliary Contact - 0 NO - 0 NC - Auxiliary Circuit 50 Hz	EH04-20N	1	piece
GHE3401903R0001	ESB-PLK40/63 Sealing Cover	ESB-PLK40/63	1	piece
GHE3201902R0001	ESB-DIS Distance Piece	ESB-DIS	1	piece

Categories

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

Low Voltage Products and Systems → Modular DIN Rail Products → Command and Signalling Devices → Installation Contactors

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