SIEMENS

Data sheet 3RE4122-3BA31-1KH3

STARTER, 3RE41223BA311KY0, WITH MODS



product brand name	Siemens
product designation	Non-reversing motor starter
special product feature	Hand-Off-Auto Selector Switch, CPT Std Capacity 480/240:120V
General technical data	
weight [lb]	13 lb
Height x Width x Depth [in]	14 × 8 × 7 in
touch protection against electrical shock	NA for enclosed products
installation altitude [ft] at height above sea level maximum	6 560 ft
ambient temperature [°F] during storage	-22 ... +149 °F
ambient temperature [°F] during operation	-4 ... +104 °F
ambient temperature during storage	-30 ... +65 °C
ambient temperature during operation	-20 ... +40 °C
country of origin	Germany
Power and control electronics	
number of poles for main current circuit	3
type of voltage of the control supply voltage	AC
control supply voltage	
● at AC at 50 Hz rated value	110 V
● at AC at 60 Hz rated value	120 V
disconnector functionality	No
yielded mechanical performance [hp] for 3-phase AC motor	
● at 200/208 V rated value	2 hp
● at 220/230 V rated value	3 hp
● at 460/480 V rated value	5 hp
● at 575/600 V rated value	7.5 hp
Contactor	
number of NO contacts for main contacts	3
operating voltage for main current circuit at AC at 60 Hz maximum	600 V
operating voltage at AC-3 rated value maximum	600 V
mechanical service life (operating cycles) of the main contacts typical	30 000 000
Auxiliary contact	
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of total auxiliary contacts maximum	8
contact rating of auxiliary contacts of contactor according to UL	10A@600V(A600), 2.5A@600V(Q600)
Coil	
apparent pick-up power of magnet coil at AC	67 VA
apparent holding power of magnet coil at AC	6.5 VA
operating range factor control supply voltage rated value of	0.8 ... 1.1

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magnet coil	
ON-delay time	9 ... 38 ms
OFF-delay time	4 ... 16 ms
Overload relay	
product function	
● overload protection	Yes
● test function	Yes
● external reset	Yes
reset function	Manual, automatic and remote (with optional accessory)
adjustment range of thermal overload trip unit	9 ... 12.5
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	1
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
Enclosure	
degree of protection NEMA rating of the enclosure	NEMA 1 large size enclosure
design of the housing	indoors, usable on a general basis
Mounting/wiring	
mounting position	vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Screw-type terminals
tightening torque [lbf·in] for supply	18 ... 21 lbf·in
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	2x (16 ... 12), 2x (14 ... 8)
temperature of the conductor for supply maximum permissible	60 °C
material of the conductor for supply	CU
type of electrical connection for load-side outgoing feeder	Screw-type terminals
tightening torque [lbf·in] for load-side outgoing feeder	18 ... 21 lbf·in
type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded	2x (16 ... 12), 2x (14 ... 8)
temperature of the conductor for load-side outgoing feeder maximum permissible	60 °C
material of the conductor for load-side outgoing feeder	CU
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf·in] at magnet coil	7 ... 10 lbf·in
type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	2x (16 ... 12), 2x (14 ... 8)
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
type of electrical connection for auxiliary contacts	Screw-type terminals
tightening torque [lbf·in] at contactor for auxiliary contacts	7 ... 10 lbf·in
type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded	2x (20 ... 16), 2x (18 ... 14)
temperature of the conductor at contactor for auxiliary contacts maximum permissible	75 °C
material of the conductor at contactor for auxiliary contacts	CU
type of electrical connection at overload relay for auxiliary contacts	Screw-type terminals
tightening torque [lbf·in] at overload relay for auxiliary contacts	7 ... 10 lbf·in
type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded	2x (20 ... 16), 2x (18 ... 14)
temperature of the conductor at overload relay for auxiliary contacts maximum permissible	70 °C
material of the conductor at overload relay for auxiliary contacts	CU
Short-circuit current rating	
design of the fuse link for short-circuit protection of the main circuit required	Class J
design of the short-circuit trip	Thermal magnetic circuit breaker
maximum short-circuit current breaking capacity (Icu)	
● at 240 V	5 kA
● at 480 V	5 kA
● at 600 V	5 kA
certificate of suitability	UL 60947-4-1

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Further information

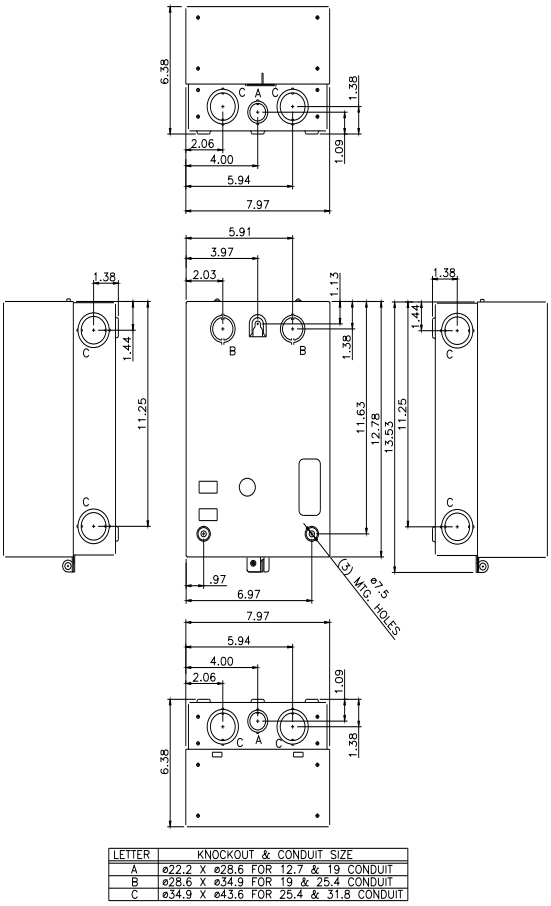
Industrial Controls - Product Overview (Catalogs, Brochures,…)
www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=3RE4122-3BA31-1KH3

Search Datasheet in Service&Support (Manuals)
https://support.industry.siemens.com/cs/US/en/ps/3RE4122-3BA31-1KH3/man

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RE4122-3BA31-1KH3&lang=en

Certificates/approvals
https://support.industry.siemens.com/cs/US/en/ps/3RE4122-3BA31-1KH3/certificate



LETTER	KNOCKOUT & CONDUIT SIZE
A	ø22.2 X ø28.6 FOR 12.7 & 19 CONDUIT
B	ø28.6 X ø34.9 FOR 19 & 25.4 CONDUIT
C	ø34.9 X ø43.6 FOR 25.4 & 31.8 CONDUIT

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