SIEMENS

Data sheet 3RE4121-5AA15-4SB0

STARTER, 3RE41215AA154SB0, WITH MODS

Figure similar

Product brand name	Siemens
Product designation	Non-reversing motor starter
Special product feature	Start-Stop Push Buttons

General technical data	
Weight [lb]	8 lb
Height x Width x Depth [in]	11 × 7 × 5 in
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	24 V
• at AC at 60 Hz rated value	24 V
Disconnector functionality	No
Yielded mechanical performance [hp] for three-phase AC motor	
• at 200/208 V rated value	1.5 hp
• at 220/230 V rated value	2 hp
• at 460/480 V rated value	3 hp
• at 575/600 V rated value	5 hp

Contactor	
Number of NO contacts for main contacts	3
Operating voltage at AC-3 rated value maximum	600 V
Mechanical service life (switching cycles) of the main contacts typical	30 000 000

Auxiliary contact	
Number of NC contacts for auxiliary contacts	0
Number of NO contacts for auxiliary contacts	1
Number of total auxiliary contacts maximum	6
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	26.4 V·A
Apparent holding power of magnet coil at AC	4.4 V·A
Operating range factor control supply voltage rated value of magnet coil	0.8 ... 1.1
Switch-on delay time	9 ... 35 ms
Off-delay time	3.5 ... 14 ms

Overload relay	
Product function	
• Overload protection	Yes
• Phase failure detection	Yes
• Phase unbalance	Yes
• Ground fault detection	Yes
• Test function	Yes
• External reset	Yes
Reset function	Manual, automatic and remote
(trip class)	CLASS 5 / 10 / 20 / 30
Adjustment range of thermal overload trip unit	3 ... 12
Number of NC contacts of auxiliary contacts of overload relay	1

Number of NO contacts of auxiliary contacts of overload relay	1
Operating current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	1 A
Contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
Insulation voltage	
• with single-phase operation at AC rated value	600 V
• with multi-phase operation at AC rated value	300 V

Enclosure	
Degree of protection NEMA rating of the enclosure	NEMA 1 standard size enclosure
Design of the housing	Indoor general purpose use

Mounting/wiring	
(mounting position)	Vertical
(mounting type)	Surface mounting and installation
Type of electrical connection for supply voltage line-side	Screw-type terminals
Tightening torque [lbf·in] for supply	7 ... 10 lbf·in
Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded	2x (20 ... 16), 2x (18 ... 14), 2x 12
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	7 ... 10 lbf·in
Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-stranded	2x (20 ... 16), 2x (18 ... 14), 2x 12
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 at AWG conductors single or multi-stranded	2x (20 ... 16), 2x (18 ... 14), 2x 12
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 at AWG conductors for auxiliary contacts single or multi-stranded	2x (20 ... 16), 2x (18 ... 14), 2x 12
Temperature of the conductor at contactor for auxiliary contacts maximum permissible	75 °C
Material of the conductor at contactor for auxiliary contacts	CU
Tightening torque [lbf·in] at overload relay for auxiliary contacts	7 ... 10 lbf·in
Type of connectable conductor cross-sections at overload relay at AWG conductors for auxiliary contacts single or multi-stranded	1x (20 ... 14), 2x (20 ... 14)
Temperature of the conductor at overload relay for auxiliary contacts maximum permissible	75 °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

Further information

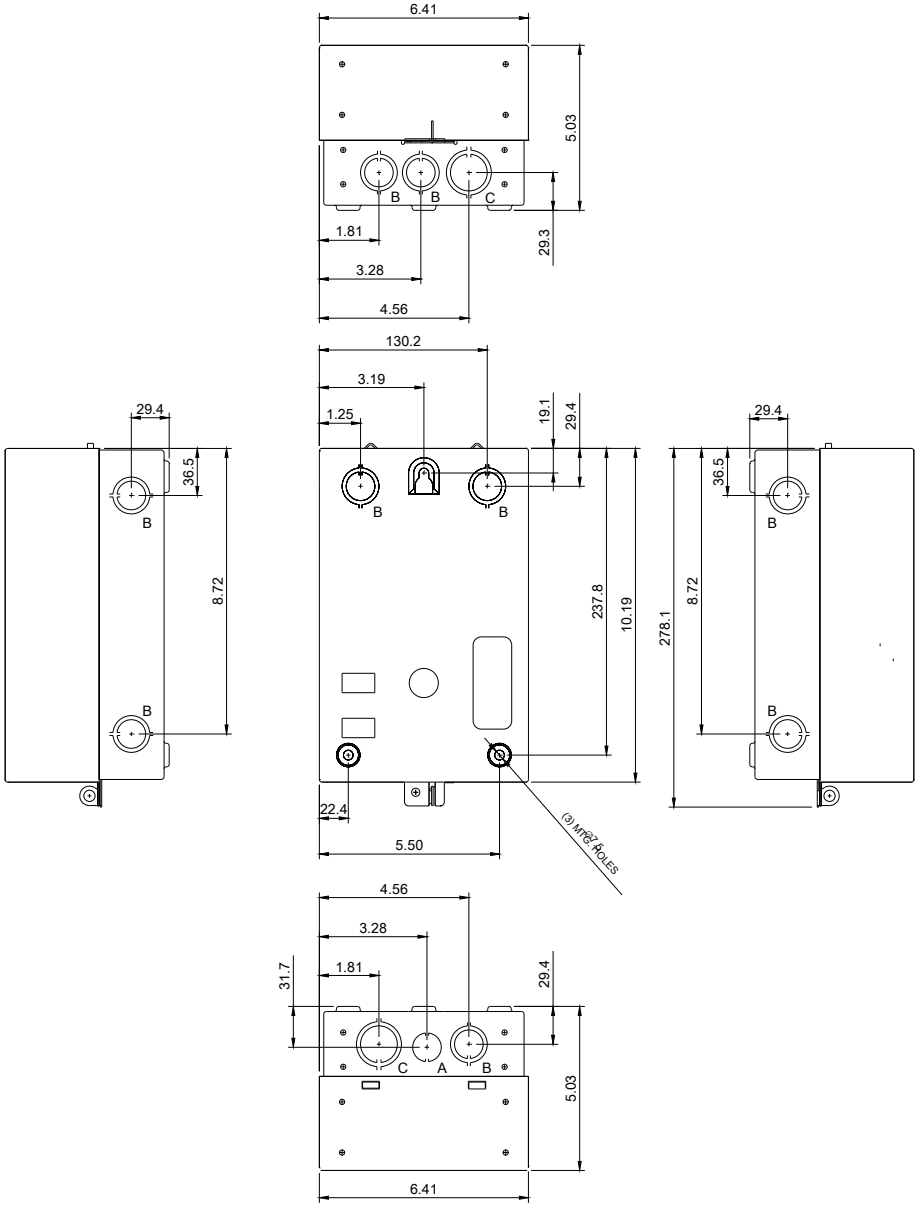
Industrial Controls - Product Overview (Catalogs, Brochures,…)
www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=3RE4121-5AA15-4SB0

Search Datasheet in Service&Support (Manuals)
https://support.industry.siemens.com/cs/US/en/ps/3RE4121-5AA15-4SB0/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=3RE4121-5AA15-4SB0&lang=en

Certificates/approvals
https://support.industry.siemens.com/cs/US/en/ps/3RE4121-5AA15-4SB0/certificate



LETTER	KNOCKOUT & CONDUIT SIZE
A	%%C22.2 FOR 12.7 CONDUIT
B	%%C22.2 X %%C28.6 FOR 12.7 & 19 CONDUIT
C	%%C28.6 X %%C34.9 FOR 19 & 25.4 CONDUIT

last modified: 04/02/2019