SIEMENS

Data sheet

3RE4121-5CA31-1KY0

STARTER, FVNR, S00, 3PH, THOLR, 120V, N3R/4/12



product brand name	Siemens		
product designation	Non-reversing motor starter		
special product feature	No factory installed accessories		
General technical data			
weight [lb]	14 lb		
Height x Width x Depth [in]	12 × 10 × 6 in		
touch protection against electrical shock	NA for enclosed products		
installation altitude [ft] at height above sea level maximum	6 560 ft		
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	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 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	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 VA		
apparent holding power of magnet coil at AC	4.4 VA		
operating range factor control supply voltage rated value of magnet coil	0.8 1.1		
ON-delay time	9 35 ms		
OFF-delay time	3.5 14 ms		
Overload relay			

product function						
 overload protection 	n		Yes			
 test function 			Yes			
 external reset 			Yes			
reset function			Manu	al, automatic and remote (with optional accessory)		
adjustment range of the	rmal overload trip unit		9 1	2.5		
number of NC contacts	of auxiliary contacts of ov	verload relay	1			
number of NO contacts	of auxiliary contacts of ov	verload relay	1			
	y contacts of overload rel	ay according to	5A@6	00VAC (B600), 1A@250VDC (R300)		
UL						
Enclosure		-		2/20/4/40 and a suggestion of the suggestion of t		
	MA rating of the enclosur	e		3/3R/4/12 enclosure		
design of the housing			Dust-	& watertight for outdoor use		
Mounting/wiring						
mounting position			vertica			
fastening method			-	ce mounting and installation		
	tion for supply voltage lir	ie-side		-type terminals		
tightening torque [lbf·in]) lbf·in		
type of connectable con AWG cables single or m	ductor cross-sections at l ulti-stranded	ine-side for		2x (20 16), 2x (18 14), 2x 12		
temperature of the cond	uctor for supply maximur	n permissible	60 °C			
material of the conducto	r for supply		CU			
type of electrical connect	tion for load-side outgoin	g feeder	Screw	-type terminals		
tightening torque [lbf·in]	for load-side outgoing fee	eder	7 1) Ibf-in		
5.	ductor cross-sections for eder single or multi-strar		2x (20 16), 2x (18 14), 2x 12			
temperature of the cond maximum permissible	uctor for load-side outgoi	ng feeder	60 °C			
material of the conducto	r for load-side outgoing f	eeder	CU			
type of electrical connec	tion of magnet coil		Screw-type terminals			
tightening torque [lbf·in]	at magnet coil		7 1) lbf-in		
type of connectable con AWG cables single or m	ductor cross-sections of i ulti-stranded	magnet coil for	2x (20	16), 2x (18 14), 2x 12		
temperature of the cond permissible	uctor at magnet coil max	imum	75 °C			
material of the conducto	r at magnet coil		CU			
type of electrical connect	tion for auxiliary contacts	5	Screw	-type terminals		
tightening torque [lbf·in]	at contactor for auxiliary	contacts	7 1) Ibf·in		
	ductor cross-sections at / contacts single or multi-		2x (20	16), 2x (18 14), 2x 12		
temperature of the cond maximum permissible	uctor at contactor for aux	iliary contacts	75 °C			
material of the conducto	r at contactor for auxiliary	y contacts	CU	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	70 °C			
material of the conductor at overload relay for auxiliary contacts		CU	CU			
Short-circuit current rati	ng					
design of the fuse link for short-circuit protection of the main circuit required		Class	J			
design of the short-circuit trip		Thern	Thermal magnetic circuit breaker			
maximum short-circuit current breaking capacity (Icu)						
• at 240 V		5 kA	5 kA			
• at 480 V		5 kA				
● at 600 V		5 kA	5 kA			
certificate of suitability UL			UL 60	947-4-1		
Approvals Certificates						
General Product Approval	Test Certificates	other		Environment		





Environmental Confirmations

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=3RE4121-5CA31-1KY0

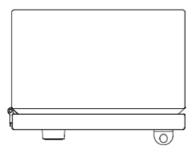
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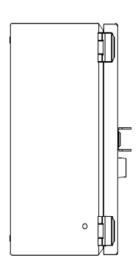
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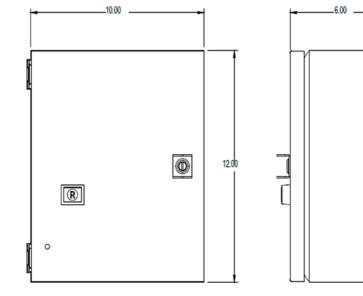
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RE4121-5CA31-1KY0&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/3RE4121-5CA31-1KY0/certificate









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