SIEMENS

Data sheet

3RE4122-7CA31-1GY0



STARTER, FVNR, S0, 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]	15 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 	10 hp		
 at 220/230 V rated value 	10 hp		
• at 460/480 V rated value	20 hp		
• at 575/600 V rated value	25 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	10 000 000		
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	79 VA		
apparent holding power of magnet coil at AC	8.5 VA		
operating range factor control supply voltage rated value of magnet coil	0.8 1.1		
ON-delay time	8 40 ms		
OFF-delay time	4 16 ms		
Overload relay			

product function						
 overload protection 	on		Yes			
 test function 			Yes			
 external reset 			Yes			
reset function				al, automatic and remote (with optional accessory)		
adjustment range of the	· · · · · · · · · · · · · · · · · · ·		4.5	6.3		
	of auxiliary contacts of ov		1			
	of auxiliary contacts of ov		1			
contact rating of auxiliar UL	ry contacts of overload re	ay according to	5A@6	600VAC (B600), 1A@250VDC (R300)		
Enclosure						
degree of protection NE	MA rating of the enclosu	e	NEM	A 3/3R/4/12 enclosure		
design of the housing			Dust-	& watertight for outdoor use		
Mounting/wiring						
mounting position			vertic	al		
fastening method			Surfa	ce mounting and installation		
	ction for supply voltage lir	e-side	-	<i>y</i> -type terminals		
tightening torque [lbf·in]			18 21 lbf-in			
	ductor cross-sections at	ine-side for	2x (16	5 12), 2x (14 8)		
temperature of the cond	luctor for supply maximur	n permissible	60 °C			
material of the conducto	or for supply		CU			
type of electrical connect	ction for load-side outgoin	g feeder	Screv	Screw-type terminals		
tightening torque [lbf·in]	for load-side outgoing fe	eder	18	21 lbf-in		
5.	ductor cross-sections for eeder single or multi-strar		2x (16	5 12), 2x (14 8)		
temperature of the cond maximum permissible	luctor for load-side outgoi	ng feeder	60 °C			
material of the conducto	or for load-side outgoing f	eeder	CU			
type of electrical connect	ction of magnet coil		Screv	v-type terminals		
tightening torque [lbf·in]	at magnet coil		7 1	0 lbf·in		
type of connectable con AWG cables single or m	ductor cross-sections of nulti-stranded	magnet coil for		5 12), 2x (14 8)		
permissible	luctor at magnet coil max	imum	75 °C			
material of the conducto			CU			
	ction for auxiliary contacts			<i>i</i> -type terminals		
	at contactor for auxiliary			7 10 lbf·in		
AWG cables for auxiliar	ductor cross-sections at y contacts single or multi	stranded		0 16), 2x (18 14)		
maximum permissible	luctor at contactor for aux	,	75 °C			
material of the conductor at contactor for auxiliary contacts			CU			
type of electrical connection at overload relay for auxiliary contacts			Screv	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 rat	ing					
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				
• at 480 V		5 kA				
• at 600 V			5 kA			
certificate of suitability			UL 60	947-4-1		
Approvals Certificates						
General Product Approval	Test Certificates	other		Environment		





Confirmation

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=3RE4122-7CA31-1GY0

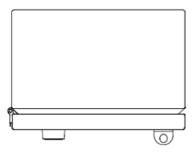
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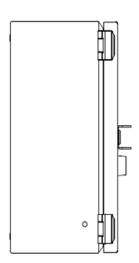
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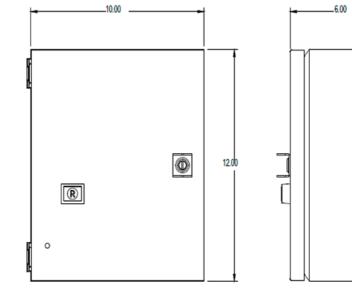
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RE4122-7CA31-1GY0&lang=en

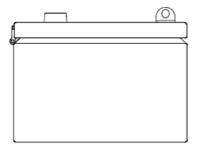
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/3RE4122-7CA31-1GY0/certificate









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