SIEMENS

Data sheet

US2:73CR34DFA

Enclosed soft starter, Controller 3RW40271BB14, Std. duty rating 20HP @460V, Std. duty current rating 29A Control voltage 110-230 AC/DC Enclosure type NEMA 3/3R Weather proof outdoor use



product brand name	Class 73
design of the product	Enclosed soft starter
special product feature	Control transformer, built-in overload relay and bypass contactor included.
General technical data	
weight [lb]	53 lb
Height x Width x Depth [in]	25 × 18 × 13 in
touch protection against electrical shock	NA for enclosed products
installation altitude [ft] at height above sea level maximum	6560 ft
ambient temperature [°F]	
 during storage 	-22 +149 °F
during operation	-4 +104 °F
ambient temperature	
 during storage 	-30 +65 °C
during operation	-20 +40 °C
country of origin	USA
Power and control electronics	
manufacturer's article number of soft starter	<u>3RW40271BB14</u>
number of poles for main current circuit	3
design of power semiconductors (thyristors) for soft starter control	2 controlled phases
operating range factor supply voltage rated value	0.85 1.1
operating range factor of control voltage rated value	0.85 1.1
operating condition for standard duty	Class 10 standard duty (350% of motor FLA for 10 seconds)
operating condition for severe duty	NA
Features and functions	
ramp-up (soft starting)/ramp-down (soft stop)	Yes
starting voltage [%]	40 100 %
stopping voltage [%]	40 100 %
voltage ramp	Yes
ramp-up time	0 20 s
ramp-down time	0 20 s
torque control	No
adjustable current limitation	Yes
creep speed in both directions of rotation	No
pump ramp down	No
integrated bypass contact system	Yes
external isolation contactor	Yes
intrinsic device protection	Yes
overload protection	Yes
trip class	CLASS 5 / 15 / 20

reset function	Manual, automatic and remote
thermistor motor protection	No
inside-delta circuit	No
breakaway pulse	No
DC braking	No
combined braking	No
motor heating	No
configuration of control input 1	ON / OFF
configuration of control input 2	NA
configuration of control input 3	NA
configuration of control input 4	NA
configuration of relay output 1	ON / RUN
configuration of relay output 2	BYPASSED
configuration of relay output 3	OVERLOAD / FAILURE
configuration of relay output 4	NA
display version	4 LEDs
operating measured value display	No
product extension optional human machine interface module	No
type of communication optional	None
error logbook	No
event list	No
slave pointer function	No
trace function	No
number of parameter sets	1
engineering software (Soft Starter ES)	No
disconnector functionality	No
Contactor	
size of contactor	NA
Coil	NA
	40/20
type of voltage of the control supply voltage	AC/DC
control supply voltage	
• at DC rated value	110 230 V
• at AC at 50 Hz rated value	110 230 V
at AC at 60 Hz rated value	110 230 V
Enclosure	
Enclosure degree of protection NEMA rating of the enclosure	NEMA 3/3R
	NEMA 3/3R Weather proof for outdoor use
degree of protection NEMA rating of the enclosure	_
degree of protection NEMA rating of the enclosure design of the housing	Weather proof for outdoor use
degree of protection NEMA rating of the enclosure design of the housing type of cooling	Weather proof for outdoor use
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring	Weather proof for outdoor use None
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position	Weather proof for outdoor use None Vertical
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method	Weather proof for outdoor use None Vertical Surface mounting and installation
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of connectable conductor cross-sections at line-side for	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug 2/0 14 AWG
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug 2/0 14 AWG 75 °C
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of connectable conductor cross-sections at line-side type of connectable conductor for supply maximum permissible material of the conductor for supply type of electrical connection for supply maximum permissible	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug 2/0 14 AWG 75 °C CU Box lug Nug
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug 2/0 14 AWG 75 °C CU
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of connectable conductor cross-sections at line-side type of connectable conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug 2/0 14 AWG 75 °C CU Box lug 18 22 lbf-in
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of connectable conductor cross-sections at line-side type of connectable conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug 2/0 14 AWG 75 °C CU Box lug 18 22 lbf-in 2x (14 10 AWG)
degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for supply maximum permissible	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug 2/0 14 AWG 75 °C CU Box lug 18 22 lbf-in 2x (14 10 AWG) 75 °C
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degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method wire length between motor starter and motor maximum type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of cleatrical connection for load-side outgoing feeder type of electrical connection for load-side outgoing feeder type of electrical connection for load-side outgoing feeder type of electrical connection for auxiliary and control circuit tightening torque [lbf-in] for auxiliary and control contacts with screw-type terminals temperature of the conductor for auxiliary and control contacts	Weather proof for outdoor use None Vertical Surface mounting and installation 300 m Box lug 2/0 14 AWG 75 °C CU Box lug 18 22 lbf-in 2x (14 10 AWG) 75 °C CU screw-type terminals 7 10 lbf-in
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circuit required	
design of the short-circuit trip	Thermal magnetic circuit breaker
maximum short-circuit current breaking capacity (lcu)	
• at 240 V	42 kA
• at 480 V	42 kA
• at 600 V	0 kA
certificate of suitability	NEMA ICS 2; UL 508A
Example and the former of the second	

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=US2:73CR34DFA

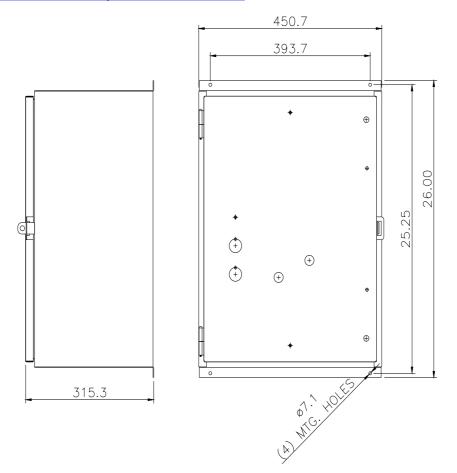
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:73CR34DFA

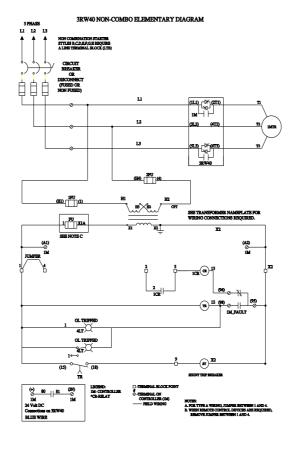
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:73CR34DFA&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:73CR34DFA/certificate





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