SIEMENS

Data sheet US2:73DT34DFA



Enclosed soft starter, Controller 3RW44251BC34, Std. duty rating 30HP @460V, Std. duty current rating 51A Control voltage 115Vac 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]	55 lb
Height x Width x Depth [in]	26 × 13 × 15 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	3RW44251BC34
number of poles for main current circuit	3
design of power semiconductors (thyristors) for soft starter control	3 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	Class 20 severe duty (350% of motor FLA for 20 seconds)
Features and functions	
ramp-up (soft starting)/ramp-down (soft stop)	Yes
starting voltage [%]	20 100 %
stopping voltage [%]	20 100 %
voltage ramp	Yes
ramp-up time	1 360 s
ramp-down time	1 360 s
torque control	Yes
starting torque [%]	20 100 %
stopping torque [%]	20 100 %
torque limitation [%]	20 200 %
ramp time of torque	1 360 s
adjustable current limitation	Yes
creep speed in both directions of rotation	Yes
pump ramp down	Yes
integrated bypass contact system	Yes

automal inclution contentor	No
external isolation contactor	No
intrinsic device protection	Yes
overload protection	Yes
trip class	CLASS 5 / 10 / 15 / 20 / 30
reset function	Manual and automatic
thermistor motor protection	Yes
inside-delta circuit	Yes
breakaway pulse	Yes
DC braking	Yes
combined braking	Yes
motor heating	Yes
configuration of control input 1	Factory set as START MOTOR
configuration of control input 2	programmable
configuration of control input 3	programmable
configuration of control input 4	Factory set as TRIP RESET
configuration of relay output 1	Factory set as ON-TIME MOTOR
configuration of relay output 2	programmable
configuration of relay output 3	programmable
configuration of relay output 4	Factory set as GROUP ERROR
display version	Graphic display
operating measured value display	Yes
product extension optional human machine interface module	Yes
type of communication optional	With optional Profibus or Profinet
error logbook	Yes
event list	Yes
slave pointer function	Yes
trace function	Yes
number of parameter sets	3
engineering software (Soft Starter ES)	Yes
disconnector functionality	No
Contactor	
size of contactor	NA
Coil	
Coil	AC
type of voltage of the control supply voltage	AC
type of voltage of the control supply voltage control supply voltage	
type of voltage of the control supply voltage control supply voltage • at AC at 50 Hz rated value	115 V
type of voltage of the control supply voltage control supply voltage	
type of voltage of the control supply voltage control supply voltage	115 V 115 V
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R
type of voltage of the control supply voltage control supply voltage • at AC at 50 Hz rated value • at AC at 60 Hz rated value Enclosure degree of protection NEMA rating of the enclosure design of the housing	115 V 115 V NEMA 3/3R Weather proof for outdoor use
type of voltage of the control supply voltage control supply voltage • at AC at 50 Hz rated value • at AC at 60 Hz rated value Enclosure degree of protection NEMA rating of the enclosure design of the housing type of cooling	115 V 115 V NEMA 3/3R
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals
type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value at AC at 60 Hz rated value Enclosure 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 tightening torque [lbf-in] for supply	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf·in
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals
type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value at AC at 60 Hz rated value Enclosure 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 tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf·in
type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value at AC at 60 Hz rated value Enclosure 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 tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf·in 2/0 14 AWG
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf·in 2/0 14 AWG
type of voltage of the control supply voltage control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in 2/0 14 AWG 75 °C CU
type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value at AC at 60 Hz rated value Enclosure 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 tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply type of electrical connection for supply	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf·in 2/0 14 AWG 75 °C CU Box lug
type of voltage of the control supply voltage ontrol supply voltage at AC at 50 Hz rated value at AC at 60 Hz rated value Enclosure 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 tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply type of electrical connection for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf·in 2/0 14 AWG 75 °C CU Box lug 36 53 lbf·in 10 2/0 AWG (front only) or 10 2/0 AWG (back only) or 2x (10 1/0 AWG)
type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value at AC at 60 Hz rated value Enclosure 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 tightening torque [lbf-in] for supply 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf·in 2/0 14 AWG 75 °C CU Box lug 36 53 lbf·in 10 2/0 AWG (front only) or 10 2/0 AWG (back only) or 2x (10 1/0 AWG) (both front & back)
type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value at AC at 60 Hz rated value Enclosure 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 tightening torque [lbf-in] for supply 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 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in 2/0 14 AWG 75 °C CU Box lug 36 53 lbf-in 10 2/0 AWG (front only) or 10 2/0 AWG (back only) or 2x (10 1/0 AWG) (both front & back) 75 °C CU CU
type of voltage of the control supply voltage	115 V 115 V NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in 2/0 14 AWG 75 °C CU Box lug 36 53 lbf-in 10 2/0 AWG (front only) or 10 2/0 AWG (back only) or 2x (10 1/0 AWG) (both front & back) 75 °C
type of voltage of the control supply voltage	NEMA 3/3R Weather proof for outdoor use None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in 2/0 14 AWG 75 °C CU Box lug 36 53 lbf-in 10 2/0 AWG (front only) or 10 2/0 AWG (back only) or 2x (10 1/0 AWG) (both front & back) 75 °C CU CU screw-type terminals

maximum permissible	
material of the conductor for auxiliary and control contacts	CU
Short-circuit current rating	
design of the fuse link for short-circuit protection of the main circuit required	10kA@600V (Class H or K); 100kA@600V (Class R or J)
design of the short-circuit trip	Thermal magnetic circuit breaker
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	100 kA
• at 480 V	100 kA
● at 600 V	0 kA
certificate of suitability	NEMA ICS 2; UL 508A

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=US2:73DT34DFA

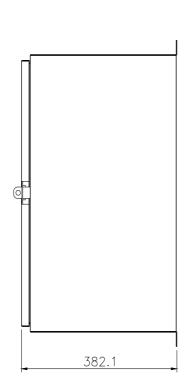
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

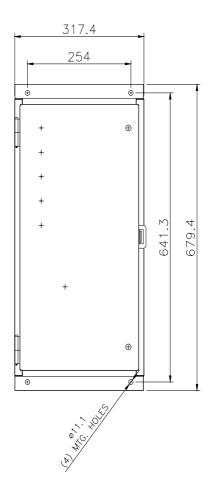
https://support.industry.siemens.com/cs/US/en/ps/US2:73DT34DFA

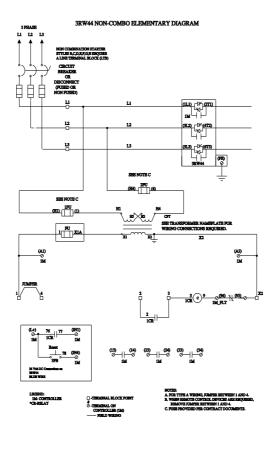
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:73DT34DFA&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:73DT34DFA/certificate







D69015H11

last modified: 11/30/2021 🖸