SIEMENS

Data sheet US2:74DT34BFAF



Enclosed soft starter, Controller 3RW44251BC34, Std duty rating 30Hp @460V, Std duty current rating 51A, Control voltage 115 AC, Combination type, 100A fusible disconnect, Enclosure NEMA type 1, Indoor general purpose use

product brand name	Class 74	
design of the product	Enclosed soft starter with fusible disconnect switch	
special product feature	Control transformer, built-in overload relay and bypass contactor included.	
General technical data		
weight [lb]	93 lb	
Height x Width x Depth [in]	36 × 23 × 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-compliant startup	
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 could -t	No
external isolation contactor	No Von
intrinsic device protection	Yes
overload protection	Yes
trip class	CLASS 5 / 10 / 15 / 20 / 30
reset function	Manual and automatic
remote reset function	Yes
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	TRIP RESET, preset
configuration of relay output 1	ON-TIME MOTOR, preset
configuration of relay output 2	programmable
configuration of relay output 3	programmable
configuration of relay output 4	GROUP ERROR, preset
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	Yes
Contactor	
size of contactor	NA
Coil	
type of voltage of the control supply voltage	AC
control supply voltage	
at AC at 50 Hz rated value	115 V
at AC at 60 Hz rated value	115 V
at AC at 60 Hz rated value	115 V
at AC at 60 Hz rated value Disconnect Switch	
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector	100A / 600V
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder	100A / 600V Class R fuse clips
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link	100A / 600V
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure	100A / 600V Class R fuse clips Class R
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure	100A / 600V Class R fuse clips Class R
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing type of cooling	100A / 600V Class R fuse clips Class R
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link 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	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation 500 m
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link 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	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation 500 m Box lug
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link 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 connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation 500 m Box lug 1x (14 2/0 AWG)
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link 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 type of connectable conductor cross-sections at line-side for	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation 500 m Box lug
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link 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 connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation 500 m Box lug 1x (14 2/0 AWG)
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link 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 type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation 500 m Box lug 1x (14 2/0 AWG) 75 °C
● at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link 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 type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply material of the conductor for supply	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation 500 m Box lug 1x (14 2/0 AWG) 75 °C AL or CU
at AC at 60 Hz rated value Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link 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 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	100A / 600V Class R fuse clips Class R NEMA Type 1 indoors, usable on a general basis None Vertical Surface mounting and installation 500 m Box lug 1x (14 2/0 AWG) 75 °C AL or CU Box lug

material of the conductor for load-side outgoing feeder	CU
type of electrical connection for auxiliary and control circuit	Screw-type terminals
tightening torque [lbf-in] for auxiliary and control contacts with screw-type terminals	7 10 lbf·in
type of connectable conductor cross-sections for AWG cables for auxiliary and control contacts	2x (20 14 AWG)
temperature of the conductor for auxiliary and control contacts maximum permissible	75 °C
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)
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=US2:74DT34BFAF

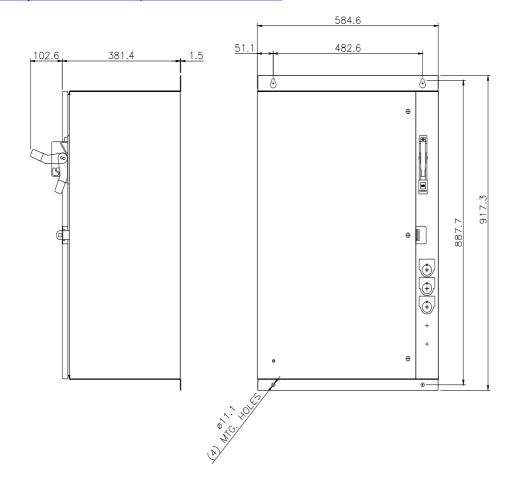
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

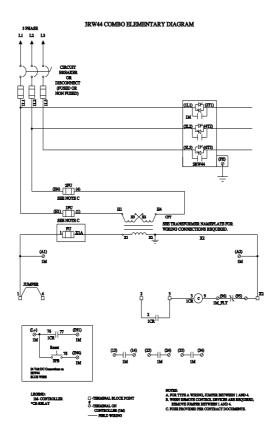
https://support.industry.siemens.com/cs/US/en/ps/US2:74DT34BFAF

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:74DT34BFAF&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:74DT34BFAF/certificate





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