



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

external isolation contactor	No
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
disconnecter 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
Disconnect Switch	
response value of switch disconnecter	100A / 600V
design of fuse holder	Class R fuse clips
operating class of the fuse link	Class R
Enclosure	
degree of protection NEMA rating of the enclosure	NEMA Type 1
design of the housing	indoors, usable on a general basis
type of cooling	None
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
wire length between motor starter and motor maximum	500 m
type of electrical connection for supply voltage line-side	Box lug
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	1x (14 ... 2/0 AWG)
temperature of the conductor for supply maximum permissible	75 °C
material of the conductor for supply	AL or CU
type of electrical connection for load-side outgoing feeder	Box lug
tightening torque [lbf-in] for load-side outgoing feeder	36 ... 53 lbf-in
type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded	10 ... 2/0 AWG (front only) or 10 ... 2/0 AWG (back only) or 2x (10 ... 1/0 AWG) (both front & back)
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C

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>



