## SIEMENS

## Data sheet

## US2:73BT32WFA



Enclosed soft starter, Controller 3RW44231BC34, Std. duty rating 10HP @230V, Std. duty current rating 32A Control voltage 115Vac Encl NEMA type 4X 304 S-steel Water/dust tight noncorrosive

Figure similar	
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]	56 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]	
<ul> <li>during storage</li> </ul>	-22 +149 °F
<ul> <li>during operation</li> </ul>	-4 +104 °F
ambient temperature	
<ul> <li>during storage</li> </ul>	-30 +65 °C
<ul> <li>during operation</li> </ul>	-20 +40 °C
country of origin	USA
Power and control electronics	
manufacturer's article number of soft starter	<u>3RW44231BC34</u>
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
	Yes
pump ramp down	100

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	Yes
module	
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
size of contactor Coil	NA
Coil	
Coil type of voltage of the control supply voltage	NA AC
Coil type of voltage of the control supply voltage control supply voltage	AC
Coil type of voltage of the control supply voltage control supply voltage • at AC at 50 Hz rated value	AC 115 V
Coil 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	AC
Coil 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	AC 115 V 115 V
Coil 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	AC 115 V 115 V 4X, 304 stainless steel
Coil 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 degree of protection NEMA rating of the enclosure	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure
Coil 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 degree of protection NEMA rating of the enclosure design of the housing	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion
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Coil 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 degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None
Coil 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 degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical
Coil 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 degree of protection NEMA rating of the enclosure design of the housing type of cooling Mounting/wiring mounting position fastening method	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation
Coil 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 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	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation 500 m
Coil 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 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	AC 115 V 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation 500 m Screw-type terminals
Coil         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         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	AC 115 V 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in
Coil         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         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	AC 115 V 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in
Coil         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         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         tightening torque [lbf-in] for supply         type of connectable conductor for supply maximum         permissible	AC 115 V 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf·in 2/0 14 AWG
Coil         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         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         tightening torque [lbf-in] for supply         type of connectable conductor for supply maximum         permissible         material of the conductor for supply	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in 2/0 14 AWG 75 °C CU
Coil         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         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         tightening torque [lbf·in] for supply         type of connectable conductor for supply maximum         permissible         material of the conductor for supply         type of electrical connection for load-side outgoing feeder	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in 2/0 14 AWG 75 °C CU Box lug
Coil         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         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         tightening torque [lbf-in] for supply         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	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion 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
Coil         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         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         tightening torque [lbf·in] for supply         type of connectable conductor for supply maximum         permissible         material of the conductor for supply         type of electrical connection for load-side outgoing feeder	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion None Vertical Surface mounting and installation 500 m Screw-type terminals 45 45 lbf-in 2/0 14 AWG 75 °C CU Box lug
Coil         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 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 at AWG cables single or multi-stranded         temperature of the conductor for supply maximum permissible         material of the conductor for supply         type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder         tightening torque [lbf·in] for load-side outgoing feeder         tightening torque [lbf·in] for load-side outgoing feeder         tightening torque [lbf·in] for load-side outgoing feeder         type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder         type of connectable conductor for supply	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion 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
Coil         type of voltage of the control supply voltage         outrol supply voltage         • at AC at 50 Hz rated value         • at AC at 60 Hz rated value         Enclosure         degree of protection NEMA rating         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         tightening torque [lbf-in] for supply         type of connectable conductor for supply maximum         permissible         material of the conductor for supply maximum         permissible         material of the conductor for supply         type of connectable conductor cross-sections at AWG         cables for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder	AC 115 V 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion 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)
Coil         type of voltage of the control supply voltage         outrol supply voltage         • at AC at 50 Hz rated value         • at AC at 60 Hz rated value         Enclosure         degree of protection NEMA rating         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         tightening torque [lbf-in] for supply         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 <tr< td=""><td>AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof &amp; resistant to corrosion 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 &amp; back) 75 °C CU</td></tr<>	AC 115 V 115 V 4X, 304 stainless steel NEMA 4x 304 stainless steel enclosure dustproof, waterproof & resistant to corrosion 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
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with screw-type terminals 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)
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
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=US2:73BT32WFA

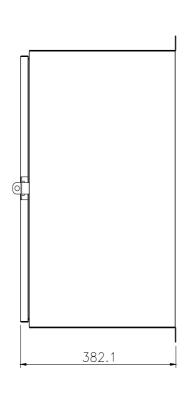
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

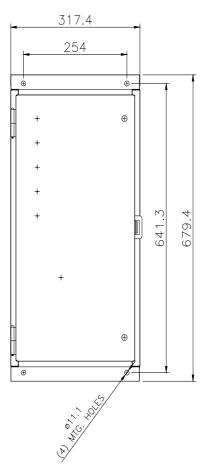
https://support.industry.siemens.com/cs/US/en/ps/US2:73BT32WFA

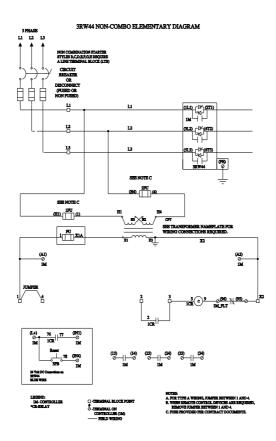
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:73BT32WFA&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:73BT32WFA/certificate







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