## **SIEMENS**

product brand name

Data sheet US2:73HR32BFA

Class 73

Enclosed soft starter, Controller 3RW40461BB14, Std. duty rating 25Hp @230V, Std. duty current rating 73A, Control voltage 110-230 AC/DC, Non-combination type, Enclosure NEMA type 1, Indoor general purpose use



| product brand name   | Class 13  |
|--|---|
| 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]  | 57 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]   |   |
| <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                        | 3RW40461BB14  |
| 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 NA  |
| configuration of control input 4   | NA<br>NA   |
| configuration of relay output 1  | ON / RUN   |
| configuration of relay output 1  | BYPASSED   |
|  | OVERLOAD / FAILURE   |
| configuration of relay output 3  | NA   |
| configuration of relay output 4  |  |
| 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<br>   |
| 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   |  |
| 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  |  |
| 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   |  |
| lastering metroa   | Surface mounting and installation  |
| wire length between motor starter and motor maximum  | Surface mounting and installation 300 m  |
| wire length between motor starter and motor maximum  | <u> </u>   |
|  | 300 m  |
| 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   | 300 m<br>Box lug   |
| 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   | 300 m<br>Box lug<br>2/0 14 AWG   |
| 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   | 300 m<br>Box lug<br>2/0 14 AWG   |
| 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  | 300 m  Box lug  2/0 14 AWG  75 °C  CU  Box lug   |
| 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  | 300 m  Box lug  2/0 14 AWG  75 °C  CU  |
| 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   | 300 m  Box lug  2/0 14 AWG  75 °C  CU  Box lug  58 58 lbf-in  3x (10 1/0 AWG) (front only) or 2x (10 1/0 AWG) (back only) or 1x (10  |
| 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder   | 300 m  Box lug  2/0 14 AWG  75 °C  CU  Box lug  58 58 lbf·in  3x (10 1/0 AWG) (front only) or 2x (10 1/0 AWG) (back only) or 1x (10 2/0 AWG) (both front & back)   |
| 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible   | 300 m  Box lug  2/0 14 AWG  75 °C  CU  Box lug  58 58 lbf·in  3x (10 1/0 AWG) (front only) or 2x (10 1/0 AWG) (back only) or 1x (10 2/0 AWG) (both front & back)  75 °C  |
| 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder   | 300 m  Box lug  2/0 14 AWG  75 °C  CU  Box lug  58 58 lbf·in  3x (10 1/0 AWG) (front only) or 2x (10 1/0 AWG) (back only) or 1x (10 2/0 AWG) (both front & back)  75 °C  CU                                    |
| 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection for auxiliary and control circuit tightening torque [lbf-in] for auxiliary and control contacts with  | 300 m  Box lug  2/0 14 AWG  75 °C  CU  Box lug  58 58 lbf·in  3x (10 1/0 AWG) (front only) or 2x (10 1/0 AWG) (back only) or 1x (10 2/0 AWG) (both front & back)  75 °C  CU  screw-type terminals              |
| 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor 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   | 300 m  Box lug  2/0 14 AWG  75 °C  CU  Box lug  58 58 lbf·in  3x (10 1/0 AWG) (front only) or 2x (10 1/0 AWG) (back only) or 1x (10 2/0 AWG) (both front & back)  75 °C  CU  screw-type terminals  7 10 lbf·in |
| 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 single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor 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 maximum permissible | 300 m  Box lug  2/0 14 AWG  75 °C  CU  Box lug  58 58 lbf·in  3x (10 1/0 AWG) (front only) or 2x (10 1/0 AWG) (back only) or 1x (10 2/0 AWG) (both front & back)  75 °C  CU  screw-type terminals  7 10 lbf·in |

| circuit required                                      |                                  |
|---|----------------------------------|
| design of the short-circuit trip                      | Thermal magnetic circuit breaker |
| maximum short-circuit current breaking capacity (Icu) |                                  |
| • at 240 V  | 42 kA                            |
| • at 480 V  | 42 kA                            |
| ● at 600 V  | 0 kA                             |
| certificate of suitability                            | NEMA ICS 2; UL 508A              |
| Further information                                   |                                  |

Industrial Controls - Product Overview (Catalogs, Brochures,...)

Industry Mall (Online ordering system)

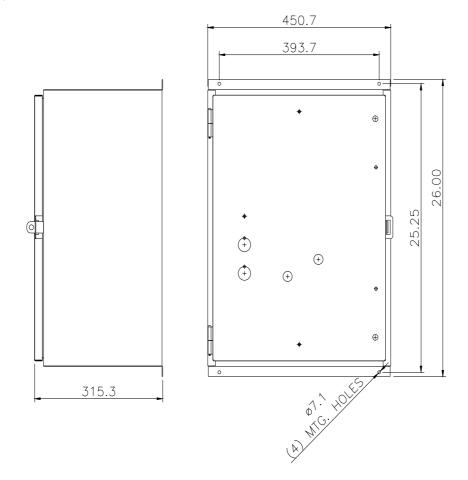
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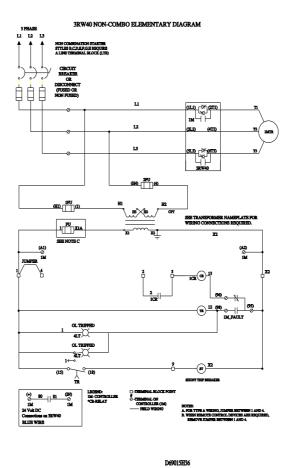
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:73HR32BFA&lang=en

Certificates/approvals

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