SIEMENS

US2:73LT35EFA **Data sheet**



Figure similar

Enclosed soft starter, Controller 3RW44446BC35, Std. duty rating 200Hp @575V, Std. duty current rating 215A, Control voltage 115 AC, Noncombination type, Encl. type 4 painted steel, Water/dust tight for outdoors

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]	113 lb
Height x Width x Depth [in]	36 × 22 × 20 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	3RW44446BC35
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 integrated bypass contact system external isolation contactor intrinsic device protection overload protection Yes trip class CLASS 5 / 10 / 15 / 20 / 30 reset function thermistor motor protection yes inside-delta circuit breakaway pulse DC braking combined braking motor heating configuration of control input 1 configuration of control input 4 configuration of relay output 1 configuration of relay output 3	
external isolation contactor 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 PC braking Yes combined braking yes configuration of control input 1 configuration of control input 2 configuration of control input 4 configuration of control input 4 configuration of relay output 1 configuration of relay output 2 configuration of relay output 3 configuration of relay output 3 programmable configuration of relay output 2 programmable configuration of relay output 3 programmable programmable	
intrinsic device protection overload protection trip class CLASS 5 / 10 / 15 / 20 / 30 reset function Manual and automatic thermistor motor protection yes inside-delta circuit Yes breakaway pulse PC braking Tyes Combined braking Yes configuration of control input 1 configuration of control input 2 configuration of control input 3 configuration of control input 4 configuration of relay output 1 configuration of relay output 2 configuration of relay output 3 configuration of relay output 3 configuration of relay output 3 programmable configuration of relay output 3 programmable configuration of relay output 3 programmable programmable configuration of relay output 2 programmable programmable programmable	
overload protection trip class CLASS 5 / 10 / 15 / 20 / 30 reset function Manual and automatic thermistor motor protection reset function Yes inside-delta circuit Yes breakaway pulse Yes DC braking Yes combined braking Yes configuration of control input 1 configuration of control input 2 configuration of control input 3 configuration of control input 4 Factory set as START MOTOR configuration of control input 4 Factory set as TRIP RESET configuration of relay output 1 configuration of relay output 2 programmable configuration of relay output 3 programmable programmable programmable programmable	
trip class CLASS 5 / 10 / 15 / 20 / 30 reset function Manual and automatic thermistor motor protection Yes inside-delta circuit Yes breakaway pulse DC braking Yes combined braking Yes motor heating Yes configuration of control input 1 configuration of control input 2 programmable configuration of control input 4 Factory set as TRIP RESET configuration of relay output 1 Factory set as ON-TIME MOTOR programmable configuration of relay output 2 programmable configuration of relay output 2 programmable programmable programmable	
reset function thermistor motor protection yes inside-delta circuit yes breakaway pulse DC braking combined braking motor heating configuration of control input 1 configuration of control input 2 configuration of control input 3 configuration of control input 4 configuration of relay output 1 configuration of relay output 2 configuration of relay output 2 configuration of relay output 2 configuration of relay output 3 programmable programmable	
thermistor motor protection inside-delta circuit yes breakaway pulse Yes DC braking yes combined braking motor heating configuration of control input 1 configuration of control input 2 programmable configuration of control input 3 configuration of control input 4 configuration of relay output 1 Factory set as START MOTOR programmable configuration of control input 3 configuration of control input 4 Factory set as TRIP RESET configuration of relay output 1 configuration of relay output 2 programmable configuration of relay output 3 programmable configuration of relay output 3 programmable programmable	
inside-delta circuit breakaway pulse Combined braking Tyes Combined braking Tyes Motor heating Configuration of control input 1 Configuration of control input 2 Configuration of control input 3 Configuration of control input 4 Configuration of relay output 1 Configuration of relay output 2 Configuration of relay output 2 Configuration of relay output 2 Configuration of relay output 3	
breakaway pulse DC braking Yes combined braking Yes motor heating Yes configuration of control input 1 configuration of control input 2 programmable configuration of control input 3 configuration of control input 4 configuration of relay output 1 configuration of relay output 1 configuration of relay output 2 programmable configuration of relay output 3 programmable configuration of relay output 3 programmable configuration of relay output 3 programmable	
DC braking combined braking Yes motor heating Yes configuration of control input 1 configuration of control input 2 configuration of control input 3 configuration of control input 4 configuration of control input 4 configuration of relay output 1 configuration of relay output 1 configuration of relay output 2 configuration of relay output 3 programmable configuration of relay output 3 programmable configuration of relay output 3 programmable	
combined braking motor heating configuration of control input 1 configuration of control input 2 configuration of control input 3 configuration of control input 4 configuration of relay output 1 configuration of relay output 2 configuration of relay output 3 configuration of relay output 2 configuration of relay output 3 programmable configuration of relay output 3 programmable configuration of relay output 3	
motor heating configuration of control input 1 configuration of control input 2 programmable configuration of control input 3 configuration of control input 4 configuration of relay output 1 configuration of relay output 2 programmable factory set as TRIP RESET Factory set as ON-TIME MOTOR programmable configuration of relay output 2 programmable configuration of relay output 3	
configuration of control input 1 configuration of control input 2 configuration of control input 3 configuration of control input 4 configuration of control input 4 configuration of relay output 1 configuration of relay output 2 configuration of relay output 3 programmable configuration of relay output 2 configuration of relay output 3 programmable	
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 control input 3 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 configuration of relay output 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 configuration of relay output 3 programmable	
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 2 programmable configuration of relay output 3 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 Mes Mes Mes Mes Mes Mes Mes Mes Mes Me	
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	
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	
Enclosure	
degree of protection NEMA rating 4 degree of protection NEMA rating of the enclosure NEMA Type 4	
design of the housing design of the housing dustproof, waterproof	
type of cooling None None	
Mounting/wiring Value Va	
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	
tightening torque [lbf·in] for supply 180 195 lbf·in	
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 270 AWG 2x 500 MCM (both front & back)	r 2x
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 180 195 lbf·in	
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded 3/0 600 kcmil (front only) or 250 500 kcmil (back only) or 2x 5 kcmil (both front & back) AWG	

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
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, J or L)
design of the short-circuit trip	Thermal magnetic circuit breaker
breaking capacity maximum short-circuit current (Icu)	
● at 240 V	50 kA
● at 480 V	50 kA
● at 600 V	50 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=US2:73LT35EFA

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

https://support.industry.siemens.com/cs/US/en/ps/US2:73LT35EFA

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:73LT35EFA&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:73LT35EFA/certificate

1/25/2022 last modified: