Eaton 134938

Eaton DS7 Soft starter, 100 A, 200 - 480 V AC, Us= 110 - 230 V AC, Frame size FS3

PRODUCT NAME	Eaton DS7 Soft starter
CATALOG NUMBER	134938
PRODUCT LENGTH/DEPTH	139 mm
PRODUCT HEIGHT	175 mm
PRODUCT WIDTH	93 mm
PRODUCT WEIGHT	1.8 kg
CERTIFICATIONS	IEC/EN 60947-4-2 GB 14048.6 UL CSA UL File No.: E251034 CE CSA File No.: 2511305 CSA-C22.2 No 14-05 UkrSEPRO CSA Class No.: 321106 UL 508 C-Tick CSA22.2-14 CSA-C22.2 No 0-M91

Powering Business Worldwide

CONTROL VOLTAGE	110/230 Vac control
PHASE	Three-phase
SPECIAL FEATURES	Internal bypass
TYPE	Soft starter for three-phase loads
VOLTAGE RATING	110/230 V
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT	Meets the product standard's requirements.
10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to

DECLARATIONS OF CONFORMITY	DA-DC-00004193.pdf DA-DC-00003978.pdf
	eaton-softstarter-s811-ds7-brochure-br039001en-en-us.pdf
	eaton-ds7-soft-starter-mn03901001z-en-us.pdf
	eaton-semiconductor-contactors-softstarter-ds7-dimensions-002.eps eaton-semiconductor-contactors-softstarter-ds7-3d-drawing-005.eps

	be evaluated.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be evaluated.
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be evaluated.
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
FITTED WITH:	Internal bypass contacts Internal bypass
POLLUTION DEGREE	2
CLASS	Other
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-3 Damp heat, cyclic, to IEC 60068-2-30
CONNECTION TO SMARTWIRE-DT	No
FRAME SIZE	FS3
ALTITUDE	Max. 2000 m Above 1000 m with 1 % derating per 100 m
AMBIENT OPERATING TEMPERATURE - MAX	40 °C
AMBIENT OPERATING TEMPERATURE - MIN	-5 °C
AMBIENT STORAGE TEMPERATURE - MAX	60 °C
AMBIENT STORAGE	-25 °C

TEMPERATURE - MIN	
ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE	30 HP
ASSIGNED MOTOR POWER AT 220/230 V, 60 HZ, 3-PHASE	30 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	75 HP
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	25 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0 W
MAINS VOLTAGE - MAX	480 V
MAINS VOLTAGE - MIN	200 V
SERIES	Generation 7
OUTPUT VOLTAGE	250 V AC (relay outputs)
NUMBER OF OUTPUTS	2 Relay Outputs (TOR, Ready)
SCREWDRIVER SIZE	0.6 x 3.5 mm, Terminal screws, Control circuit cables PZ2, 1 x 6 mm, Terminal screw, Standard screwdriver
VOLTAGE TYPE	AC
RATED OPERATIONAL VOLTAGE (UE) - MIN	230 V
RATED POWER THREE-PHASE MOTOR, INLINE, AT 230 V	30 kW
RATED POWER THREE-PHASE MOTOR, INLINE, AT 400 V	55 kW
RATED POWER THREE-PHASE MOTOR, INSIDE DELTA, AT 230 V	0 kW
RATED POWER THREE-PHASE MOTOR, INSIDE DELTA, AT 400 V	0 kW
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	25 W

VOLTAGE RATING - MAX	480 V
APPLICATION	• 1-phase motors: No • 3-phase motors: Yes • Soft starting of three-phase asynchronous motors
PROTECTION	Finger and back-of-hand proof, Protection against direct contact
MOUNTING POSITION	Vertical
INPUT CURRENT	4 mA (at 230 V AC, Digital inputs)
DROP-OUT VOLTAGE	AC operated: 0 - 15 V, AC operated
OVERVOLTAGE CATEGORY	II
DEGREE OF PROTECTION	IP20 NEMA 1
CURRENT CONSUMPTION	0,6 A/50 ms, Control circuit, Regulator supply at peak performance (close bypass) at 24 V DC 1.6 mA, Control circuit, Digital inputs, External 24 V 50 mA, Control circuit, Regulator supply
FUNCTIONS	Min. ramp time 1 s - fast switching (semiconductor contactor) Soft start function Suppression of closing transients Potential isolation between power and control sections Suppression of DC components for motors Single direction
DELAY TIME	0 - 30 s, Soft start function, Ramp times
OVERLOAD CYCLE	AC-53a: 3 - 5: 75 - 10
DROP-OUT TIME	350 ms, Control circuit, Digital Inputs, AC operated
PICK-UP VOLTAGE	108 - 253 V AC
RADIO INTERFERENCE CLASS	Class A (EN 55011)

PICK-UP TIME	250 ms at AC
RATED CONTROL VOLTAGE (UC)	110 - 230 V AC (-15 %/+10 %) 110 - 230 V AC
SUPPLY FREQUENCY	50/60 Hz, fLN, Main circuit
TERMINAL CAPACITY (STRANDED)	2 x (6 - 25) mm^2, Main cables 1 x (25 - 70) mm^2, Main cables 2 x (0.5 - 1.0) mm^2, Control circuit cables 1 x (0.5 - 1.5) mm^2, Control circuit cables
TERMINAL CAPACITY (COPPER BAND)	9 x 9 x 0.8 mm, Main cables 2 x 9 x 0.8 mm, Main cables
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	230 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	110 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	230 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	110 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V
RATED OPERATIONAL CURRENT (IE) AT AC-11	1 A
RATED OPERATIONAL CURRENT (IE) AT AC-53	100 A
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	100 A
RATED OPERATIONAL POWER AT 220/230 V, 50 HZ	30 kW
RATED OPERATIONAL POWER AT 400 V, 50 HZ	55 kW
RATED OPERATIONAL VOLTAGE (UE) - MAX	480 V
VIBRATION RESISTANCE	2M2 to EN 60721-3-2

RAMP/RUN-UP TIME	1 - 30 s
SHOCK RESISTANCE	8 g, 11 ms, Mechanical
SUITABLE FOR	Branch circuits, (UL/CSA)
TIGHTENING TORQUE	0.4 Nm, Screw terminals, Control circuit cables 6 Nm (≤ 10 mm^2) 9 Nm (> 10 mm^2)
SHORT-CIRCUIT PROTECTION RATING	3 x 170M4008, Type „2“ coordination (additional with the fuses for coordination type „1“), Main conducting paths NZMN1-M100, Type “1” coordination, Main conducting paths
START VOLTAGE	Min. 30 %, Soft start function, Start voltage = turn-off voltage Max. 100 %, Soft start function, Start voltage = turn-off voltage
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (0.5 - 1.5) mm^2, Control circuit cables 2 x (0.5 - 0.75) mm^2, Control circuit cables
TERMINAL CAPACITY (SOLID)	1 x (0.5 - 2.5) mm^2, Control circuit cables 1 x (25 - 70) mm^2, Main cables 2 x (6 - 25) mm^2, Main cables 2 x (0.5 - 1.0) mm^2, Control circuit cables
TERMINAL CAPACITY (SOLID/STRANDED AWG)	1 x (21 - 14), Control circuit cables 2 x (21 - 18), Control circuit cables 1 x (12 - 2/0), Main cables

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
:	

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