

Alco Controls

CSS-25U / CSS-32U / CSS-32W Compressor Soft Starter

Technical Bulletin

The first **VDE certified Compressor Soft Starter** for safety of household. It is used for switching, protection and starting current limitation of single phase compressors in residential heat pumps, refrigeration and air-conditioning applications.

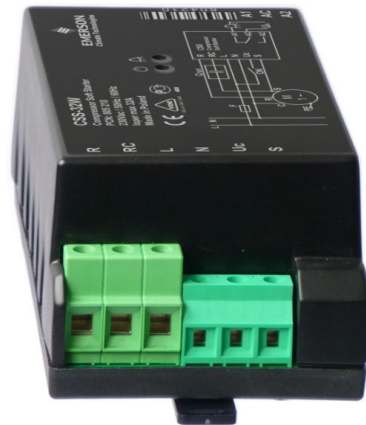
New: CSS-32W with 6mm² cross section power terminals

Features

- For motors with maximum operating current up to 25A / 32A
- Limitation of starting current to less than 45A; PCN 805209 less than 30A
- Self adjusting for use in 50 Hz or 60 Hz supply
- Self adjusting to motor current - no manual adjustment or calibration necessary
- Alarm relay output
- Start capacitor for improved motor acceleration is switched off after start
- Low voltage shutdown
- Locked rotor recognition and shutdown
- Delay function to limit number of motor starts per hour
- Thyristor protected contactor for long life
- No extra motor contactor needed
- Self diagnostics
- Mounting clip for easy installation allows DIN rail mounting in two directions
- Easy wiring by cage type screw terminals (flexible cross section 4mm ; **CSS-32W** flexible cross section 6mm)



CSS-32U Soft Starter



CSS-32W Soft Starter

Selection table

Type	Part No.	Description	Nom. Compr. Current	Max. Start Current
CSS-32U	805 204	Compressor Soft Starter incl. mounting clip and operating manual	32A max	45 A
CSS-32U	805 204M	Box with 20 pieces , mounting clips and one operating manual	32A max	45 A
CSS-32W	805 211	Compressor Soft Starter incl. mounting clip and operating manual	32A max	45 A
CSS-32W	805 211M	Box with 20 pieces , mounting clips and one operating manual	32A max	45 A
CSS-25U	805 205	Compressor Soft Starter incl. mounting clip and operating manual	25A max	45 A
CSS-25U	805 205M	Box with 20 pieces , mounting clips and one operating manual	25A max	45 A
CSS-25U	805 209	Compressor Soft Starter Im30 incl. mounting clip and operating manual	25A max	30 A
CSS-25U	805 209M	Box with 20 pieces , mounting clips and one operating manual	25A max	30 A

Accessory

K00-003	807 663	3-pol screw connector to alarm output for wires up to 2.5mm ² ; bag with 50 pieces
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CSS-25U / CSS-32U / CSS-32W Compressor Soft Starter

Technical Data

Operating voltage	230V 50 / 60 Hz nominal
Nominal compressor current	CSS-32U / - 32W: 32A max. CSS-25U : 25A max.
Maximum start current	CSS-32U / - 32W: 45A CSS-25U (805 205): 45A CSS-25U (805 209) 30A
Operating temperature	-20 to +55°C non condensing
Storage temperature	-20 ... +65°C non condensing
Start capacitor	200 ... 240 uF
Time delay after stop	0,5 ... 5 Min

Alarm relay, AgNi (SPDT)	
Resistive (AC1) max.	250V~ / 3A 30V= / 3A
Flexible cable cross section CSS-32U/-25U all terminals CSS-32W (R, RC, L terminals)	0.25 ... 4 mm 0.25 ... 6 mm
Flexible cable cross section alarm output connector K00-003	0.25 ... 2.5 mm
Max. vibration (at 10 to 1000 Hz)	4 g
Weight	430g
Protection acc. IEC 529	IP20

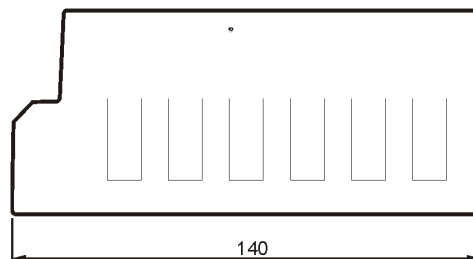
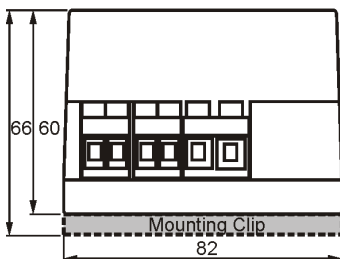
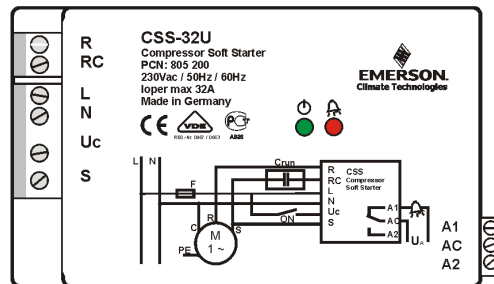
Standards

EN 60947-1	Low voltage switchgear and controlgear
EN 60947-4-2	Contactors and motor-starters - AC semiconductor motor controllers and starters
EMC 2004/108/EC	Electromagnetic Compatibility (EMC) Directive
LVD 2006/95/EC	Low Voltage Directive

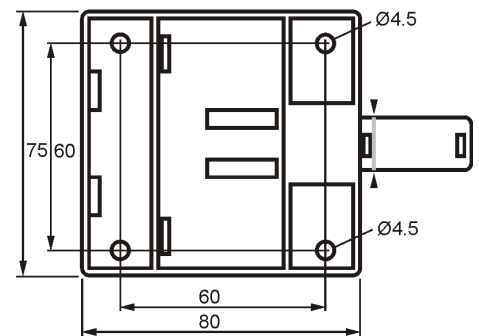
EN 60335-1	Safety of household and similar electrical appliances -
EN 60335-2-40	Part 2-40 Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers
ROHS 2002/95/EC	Restriction of Hazardous Substances Directive
Marking	CE, VDE Reg.-Nr. D967 / D663

Dimensions (mm)

Compressor Soft Starter



DIN-Rail Mounting Clip



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