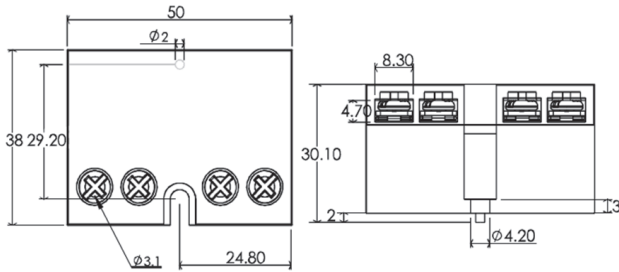


**Model Name** ECS125T

**Operating voltage** AC 110V, 50/60Hz

**Application** CSIR or CSCR Motors (0.18~2.2kW)



## Description

This model is a MCU embedded electronic switch that is designed to activate or deactivate a semiconductor device, TRIAC, as a function of the motor rotating speed and the corresponding motor starting torque.

## Feature

- Extended life span of switching contacts
- High compatibility with various motor designs
- Improved motor starting efficiency
- Neither switching noise nor trembling of contacts
- Protect auxiliary windings or start capacitors
- Return immediately from unwanted reverse motor rotation
- Mounted on either inside / outside motor frames
- Discharge start capacitors with built-in resistors

**Approvals** **RoHS**

IEC/ EN 60730-1 (Automatic electrical controls for household and similar use)  
IEC/ EN 60730-2-10 (particular requirements for motor-starting relays)

## Electrical characteristics (Typical)

Parameter	Value	Unit
Line voltage	100~120	VAC
Non repetitive peak current @ half cycle, 50/60Hz	240	A
Thermal impedance @ 8.0sec	0.8	°C/W
Initial switch-on delay time	2.0	Cycle
* Discharge resistance	5.0	KΩ
** Forced switch-off locked rotor time, 60Hz (50Hz)	7.0 (8.4)	sec
** Maximum Number of successive restarts	9	-
Forced switch-off starting coil voltage	220~250	VAC
Dielectric strength, between case and pins	2500+	VDC
Insulation resistance, between case and pins	10+	MΩ
Ambient air temperature	-20~60	°C

\* For frequent (heavy duty) restarts, it is recommended to connect an additional discharging resistor in parallel with a starting capacitor.  
\*\* These are initialized by either a power interruption or a successful motor run state.

## Wiring (Typical)

Cs: Start capacitor, Cr: Run capacitor, M1/M2: Main coil, ST: Auxiliary coil

