

# AC Auxiliary contact module (MAUX)



- Full-On monitoring of soft starters (SMC 3, SMC 33, STL)
- Function monitoring of Electronic Contactors (SC X)
- Function monitoring of motor reversing & motor contactors (SRC/DOL)
- Full-On/Off monitoring of Analogue Power Controller (SPC 1 AD)
- Dual Voltage range 230 VAC or 400 - 600 VAC 50/60 Hz
- Relay output (NO / NC) 5A 250VAC / 3A 24 VDC
- 22.5 mm module for DIN-rail mounting
- LED status indication
- IP-20 Protection

## Item selection and technical specifications

MAUX 01 600 is an auxiliary module for monitoring the status of a connected motor controller or electronic contactor. If the sense voltage across the semiconductor on the connected controller (T3 and L3) is lower than 2 VAC the output relay is switched On (NC / 11-14). The output relay will open again (NO / 11-12) when the sense voltage is higher than 2.5 VAC.

### Output specifications

Relay Output 5A 250 VAC (AC-22) 3A 24 VDC (DC22)

### Line voltage range

T2.1 - T3 208 - 240 VAC 50/60 Hz Max 10 VA 1.5 W

T2.2 - T3 380 - 600 VAC 50/60 Hz Max 35 VA 2.5 W

### Item No.

MAUX 01 A 600

### Environment

Degree of protection IP 20 Pollution degree 3

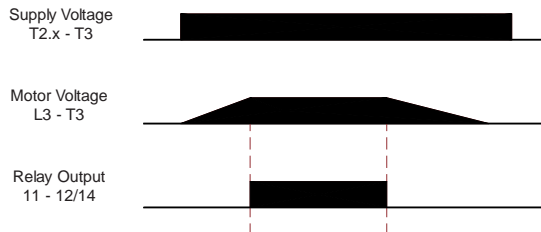
### Insulation specifications

Rated insulation voltage Ui 660 Volt

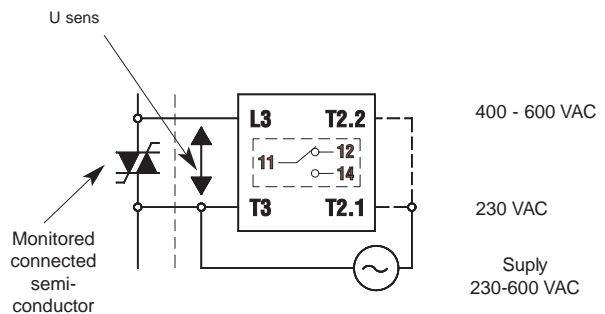
Rated impulse withstand voltage Uimp. 4 kVolt

Installation category III

### Functional diagram

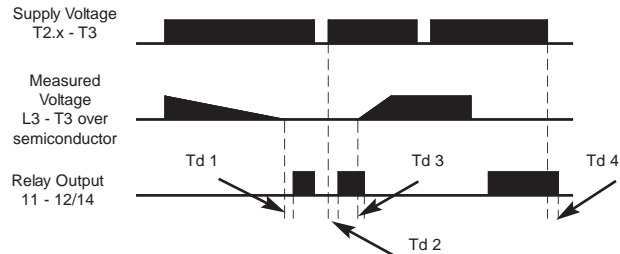


### Block diagram



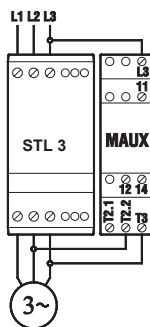
### Semiconductor voltage timing diagram

Td 1: Min 35 ms. Max. 55 ms Td 3: Min 5 ms. Max. 25 ms  
Td 2: Min 100 ms. Max. 200 ms Td 4: Min 110 ms. Max. 130 ms



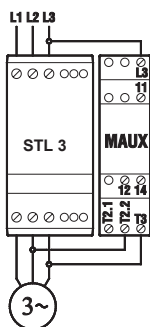
### App. Ex. STL 3 3-ph 400 V

Full-ON Monitoring with Starting Torque Limiter Type STL 3 3 Phase Motor 400 / 600 VAC



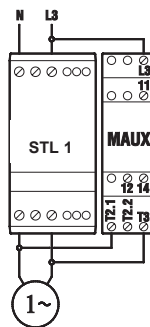
### App. Ex. STL3 3-ph 230 V

Full-ON Monitoring with Starting Torque Limiter Type STL 3 3 Phase Motor 230 VAC



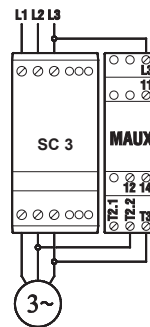
### App. Ex. STL1 1-ph 230 V

Full-ON Monitoring with Starting Torque Limiter Type STL 1 1 Phase Motor 230 VAC

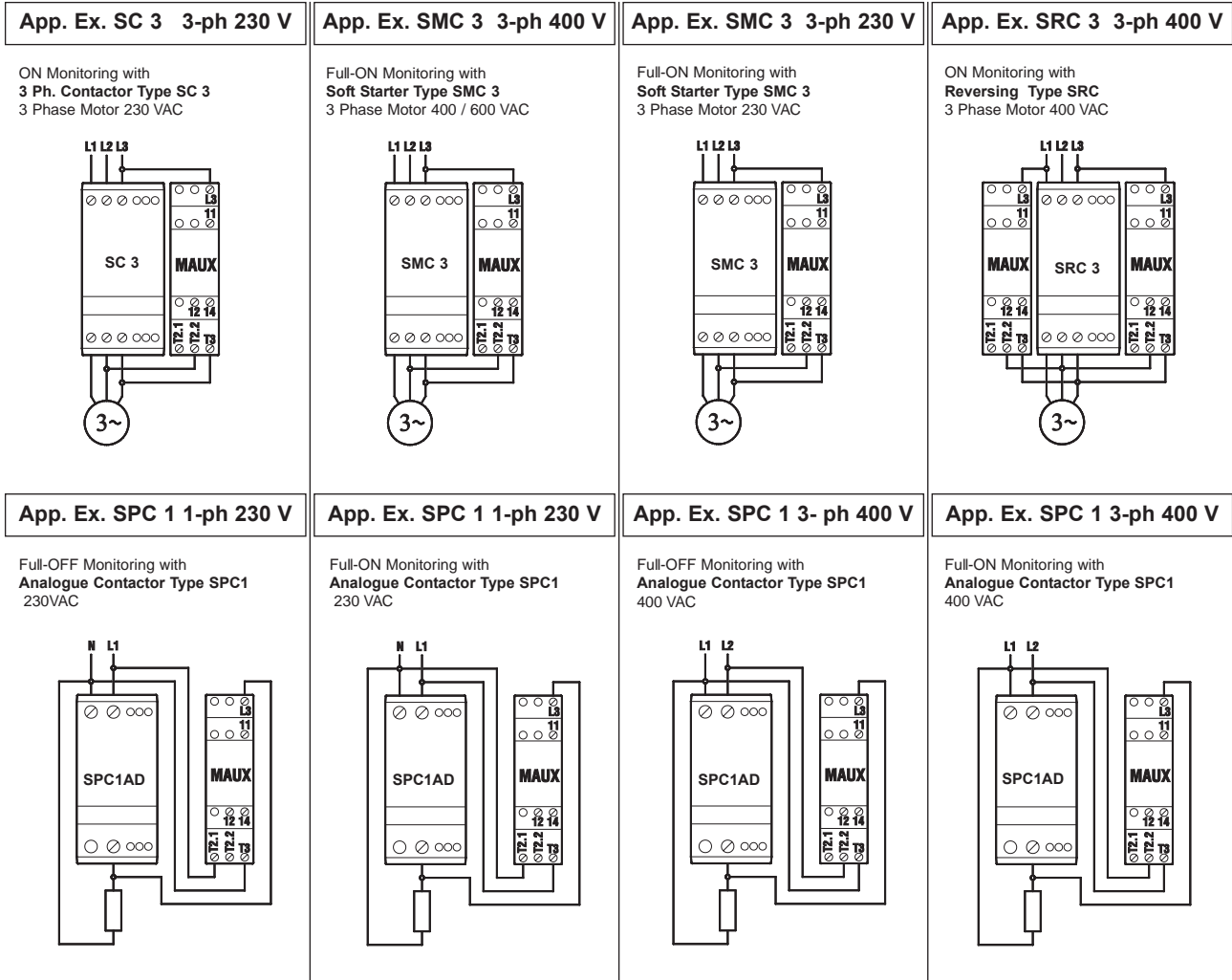


### App. Ex. SC 3 3-ph 400 V

Full-ON Monitoring with 3 Ph. Contactor Type SC 3 3 Phase Motor 400 / 600 VAC



# AC Auxiliary contact module (MAUX)



## Application example. soft starter type SMC 3 / SMC 33 with control of by-pass contactor

**Control of by-pass Contactor** (functional description): When the Control signal A1-A2 is supplied to the Soft Starter, Ram-Up is initiated. When the ramp time has elapsed the output relay in the MAUX1 will switch the by-pass contactor ON for limiting the power dissipation in the Soft Starter. When the control voltage is switched OFF the by-pass contactor will drop instantaneously, before the semiconductors are switched off, for eliminating severe arcing in the mechanical contactor. In this application the by-pass contactor can be selected from the thermal current  $I^{\text{th}}$  rating and not from the AC-3 rating.

