

User Interface Guide



ACS380



Control panel

- | | |
|--------------------|-------------------------------|
| 1. Status light | 7. Stop |
| 2. Local / remote | 8. Edit value / Move in menus |
| 3. Status icons | 9. OK / Select / Save / Menu |
| 4. Reference value | 10. Start |
| 5. Actual value | |
| 6. Back / Options | |

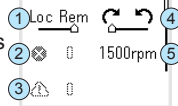


Status light

- green, steady: OK
- green, blinking: Warning
- red, steady: Fault
- red, blinking: Fault, turn power off to reset

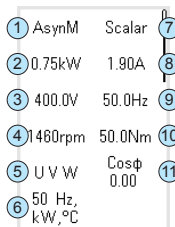
Options

- Control location
- Active fault
- Active warnings
- Forward / Reverse
- Reference



Motor data

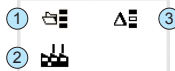
- Motor type
 - AsynM
 - PMSM
 - SynRM
- Nominal power
- Nominal voltage
- Nominal speed
- Phase order
Change direction without reconnecting motor cables
- Unit selection
- Control mode
Scalar or vector
- Nominal current
- Nominal frequency
- Nominal torque
- Nominal cos phi



Parameters

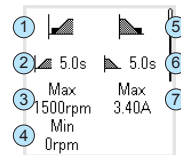
Direct access to all functions (advanced)

- Complete list
- Reset to factory defaults
- Modified only



Motor control

- Start mode
 - Const time
 - Automatic
- Acceleration time
- Max. allowed speed
- Min. allowed speed
- Stop mode
 - Coast
 - Ramp
 - DC Hold
- Deceleration time
- Max. allowed current



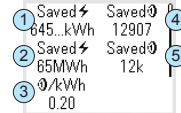
Diagnostics

- Active fault
- Active warnings
- Fault history
- Connection status



Energy efficiency

- Saved energy in kWh
- Saved energy in MWh
- Cost per kWh
- Saved money
- Saved money x1000



I/O Control macros

The menu content depends on the installed extension module.

I/O control:

① | I/O 

1. I/O control macro

Fieldbus control:

① | ethernetIP DHCP

② | 192.10. Subnet
0.128 /23

1. Protocol
2. Address settings

I/O control macros

I/O Standard (2-wire)

AI1: Reference
DI1: Start / Stop
DI2: Forward / Reverse
DI3: Constant speed sel1
DI4: Constant speed sel2
DIO1: Ramp pair selection
DIO2: Ready run

I/O ABB limited 2-wire

Integrated panel: Reference
DI1: Start / Stop
DI2: Constant speed sel1

I/O Alternate

AI1: Reference
DI1: Start forward
DI2: Start reverse
(if DI1 = DI2, stop)
DI3: Constant speed sel1
DI4: Constant speed sel2
DIO1: Ramp pair selection
DIO2: Ready run

Motor potentiometer

DI1: Start / Stop
DI2: Forward / Reverse
DI3: Reference up
DI4: Reference down
DIO1: Constant sel1
DIO2: Ready run

PID PID

AI1: Setpoint
AI2: Feedback
DI1: Start / Stop
DI2: Constant setpoint 1
DI3: Constant setpoint 2
DI4: Constant speed 1
DIO1: Ramp pair selection
DIO2: Ready run

Fieldbus control macros

CanOpen CANopen

EtherCAT EtherCAT

Profibus PROFIBUS

ProfinetIO Profinet

EthernetIP Ethernet/IP

Modbus TCP Modbus TCP





















Modbus RTU Modbus RTU

Start/stop/reference from the fieldbus

DI1: Fault reset
DI2: Not configured

Warnings/Faults

Warning Fault Description

 A2A1	 2281	Warning: Current calibration is done at the next start. Fault: Output phase current measurement fault
 A2B1	 2310	Overcurrent. The output current is more than the internal limit. This can be caused by an earth fault or phase loss.
 A2B3	 2330	Earth leakage. A load unbalance that is typically caused by an earth fault in the motor or the motor cable.
 A2B4	 2340	Short circuit. There is a short circuit in the motor or the motor cable.
	 3130	Input phase loss. The intermediate DC circuit voltage oscillates.
	 3181	Cross connection. The input and motor cable connections are incorrect.
 A3A1	 3210	DC link overvoltage. There is an overvoltage in the intermediate DC circuit.
 A3A2	 3220	DC link undervoltage. There is an undervoltage in the intermediate DC circuit.
	 3381	Output phase loss. All three phases are not connected to the motor.
 A5A0	 5091	Safe torque off. The Safe torque off (STO) function is on.
 AFF6		Identification run. The motor ID run occurs at the next start.
	 FA81	Safe torque off 1. The Safe torque off circuit 1 is broken.
	 FA82	Safe torque off 2. The Safe torque off circuit 2 is broken.