

# MORFOSE

## Datasheet

### COBOT

#### General information

|                          |  |         |
|--------------------------|--|---------|
| <b>Number of axes</b>    | <b>6 axes</b>  |         |
| Arm size                 | S  | M       |
| Max payload              | 11 kg  | 5 kg    |
| Range                    | 900 mm   | 1200 mm |
| Programming              | graphical user interface   10" touchscreen   + 20 physical buttons |         |
| Installing               | floor mounting   |         |
| Footprint                | diam. < 200 mm   |         |
| Materials                | Aluminium, steel   |         |
| Cable length (robot arm) | 5 m (can be changed on demand)                                     |         |
| Weight including cable   | < 40 kg  |         |

#### Modular assembly

|               |            |
|---------------|------------|
| Assembly time | 10 minutes |
|---------------|------------|

#### Performance

|                                     |   |
|-------------------------------------|---|
| Repeatability (ISO 9283)            | +/- 0,1 mm  |
| Nominal TCP speed                   | 1 m/s   |
| Collaboration operations            | Contact sensing   speed settings   limiting zones |
| Max. consumption in standard use    | < 450 W   |
| Average consumption in standard use | < 300 W   |

#### Environment

|                                    |                         |
|------------------------------------|-------------------------|
| Degree of protection               | IP54                    |
| Noise                              | < 65 dB(A)              |
| Tools                              |                         |
| Digital input                      | 2                       |
| Digital output                     | 2                       |
| Analog in                          | 2                       |
| Output power supply                | 12/24 V   2/1 A         |
| Tool connector type (end effector) | M8                      |
| Ambient temperature                | 0-50 °C                 |
| Ambient humidity                   | 90% RH (non-condensing) |

## Modules

| Modules | Nominal torque (Nm) | Max torque (Nm) | Lenght (mm) | Weight (kg) | Module speed (°/s) | Movement range (°) |
|---------|---------------------|-----------------|-------------|-------------|--------------------|--------------------|
| M1      | 271                 | 621             | 120         | 7           | 101,25             | ∞                  |
| M2      | 149                 | 402             | 100         | 4,5         | 105                | ∞                  |
| M3      | 81                  | 225             | 80          | 3,5         | 72                 | ∞                  |
| BD1200  | -                   | -               | 360         | 2,5         | -                  | -                  |
| BD900   | -                   | -               | 210         | 2           | -                  | -                  |
| BC1200  | -                   | -               | 380         | 3           | -                  | -                  |
| BC900   | -                   | -               | 230         | 2,5         | -                  | -                  |

## CONTROL BOX

|                         |  |
|-------------------------|--|
| Degree of protection    | IP54   |
| Ambient temperature     | 0-50 °C  |
| I/O ports*              | <i>*There is space to add other I/O parts.</i> |
| Digital input           | 16   |
| Digital output          | 16   |
| Analog input            | 2  |
| Analog output           | 2  |
| Digital input - Safety  | 4  |
| Digital output - Safety | 4  |
| I/O power supply        | 24 V 2 A                                       |
| Dimensions (WxHxD)      | 600x280x300 mm                                 |
| Weight                  | < 16 kg  |
| Materials               | Aluminium, steel                               |
| Communication           | ETHERCAT   ETHERNET   + on demand              |
| Power supply            | 200-240 VAC / 47-63 Hz                         |
| Ambient humidity        | 90% RH (non-condensing)                        |

## TEACH PENDANT

|                               |                               |
|-------------------------------|-------------------------------|
| Degree of protection          | IP54                          |
| Ambient humidity              | 90% RH                        |
| Display resolution            | 1280 x 800 pixels             |
| Materials                     | Plastic                       |
| Weight including 5 m TP cable | < 2 kg                        |
| Cable length                  | 5m (can be changed on demand) |