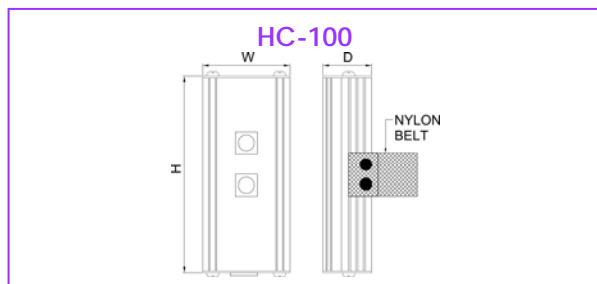
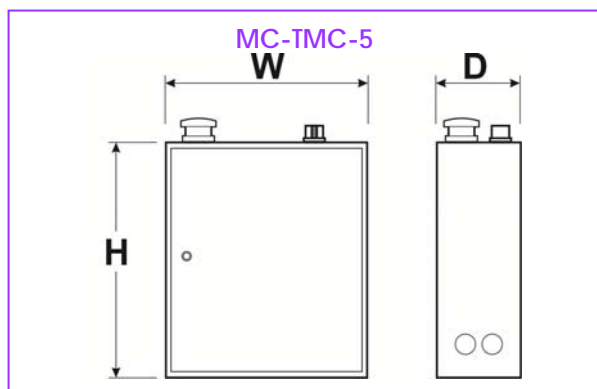


Macho Winch Control Box

Macho MC-TMC-5	Winch Control Box, variable Speed
Macho HC-100	One-Action Pendant

Winch Control Box



Environmental Data

Operation humidity	5-95% non-condensing
Operation temperature	0-40°C (32-104°F)
Installation place	indoor

Physical Data

Model	MC-TMC-5	HC-100
Weight	22.5kg	0.3kg
Size mm	W / H / D 480*560*200	W / H / D 72*164*40

Ordering Information

Model No.	Ordering No.
Macho MC-TMC-5	E4W0
Macho HC-100	E3A0

Macho MC-TMC-5 control box is designed for driving flag raising winch under 4kW in variable speed and being able to monitor up to 9 status/alarms of the winch. It works with Macho Winch Control Console perfectly to form a flexible and full functions rigging control system for stadium and swimming pools applications. It targets for venues that require high reliability for rigging system and manual bypass backup. It is also designed for easy wiring and installation.

Mechanical Data

Construction	Zinc anodized steel sheet, with hinge door
Paint / finish	Black epoxy-polyester powder paint
Mounting	Wall mounted by 4 x M8 screws
Both Sides	2 x dia.33mm hole for conduits on both sides
Bottom	76x150mm hole for cable containment

Electrical Data

Power input	380VAC~420VAC three phases four wires plus earth
Frequency	50Hz
Main Input	Max 6A per phase, max 4kW motor
Control circuit	24V AC
Input Connector	4mm ² terminals
Output Connector	4mm ² terminals
Control Bus	Macho Hoist Control Bus (Macho Bus) in CAN BUS

Operational Data

Monitor winch signals (relay signal)	<ol style="list-style-type: none"> System e-stop Local e-stop Power fault (missing phase, over/under voltage, overload) Over travel limit Slack Wire detector High Limit Low Limit
Monitor winch signals (load cell)	<ol style="list-style-type: none"> Loading (range 50kg - 1000kg) Position
Frequency inverter	Operate range 25Hz-60Hz
Starting address	Set by 10 dip switches, allowable address: 1024
Local e-stop	At top of Box
Mode Selector	Auto/ Idle/ Local
Local Control	Via 5-pin XLR male receptacle at top, to connect handheld One-Action Pendant
Indicator Lights	Power/ Mode/ Bus/ Up/ Down/ Fault
Syn in Group	Auto fine tune to same position as Master unit in the same Group (Winch to have position encoder installed and using our Macho Hoist Control System)
Control compatibility	Work with FCS-180 or FCS-PC flag raising control

Wiring Connection

Input power	5 x 4 mm ²
Output power	5 x 4 mm ²
System e-stop	2 x 1 mm ² , 24V AC
Local e-stop	2 x 1 mm ² , 24V AC
Power fault	2 x 1 mm ² , 24V AC
Over Travel Limit	2 x 1 mm ² , 24V AC
Slack Wire Detector	2 x 1 mm ² , 24V AC
High Limit	2 x 1 mm ² , 24V AC
Low Limit	2 x 1 mm ² , 24V AC
Loading	4/C Twisted pair, 12V DC
Position	6/C Twisted pair, 12V DC
Macho Bus	4/C Twisted pair, 12V DC

Safety Features

Power Failure	Last action stop running (at Auto Mode)
Safety Protection	<ol style="list-style-type: none"> Hardwire interlock Software interlock Intelligent logic: <ul style="list-style-type: none"> high limit reach, down action allow only; low limit reach, slack wire and up action allow only Optical-isolated for all input connections
Position Memory	Value retained even power failure