

Entrapment Protection Devices

For additional information, availability or additional accessories not listed, please consult inside sales.

Primary Monitored External Entrapment Protection Devices



Manaras strongly recommends the use of external entrapment protection devices. The devices listed below connect to the specific MONIT terminals on BOARD070M.

Code	Description
Monitored Photoelectric Cells	
PHOTO070	Monitored, N1 incl., thru-beam type, 2-wire, indoor, 45' range
PHOTO061	Monitored, N4X incl., thru-beam type, 4-wire, industrial env., 45' range
PHOTO065	Monitored, N4X incl., retro-refl. type, 2-wire, harsh env., 5-50' range
PHOTO045M	Monitored, N4X aluminum hood (PHOTO015), infrared thru-beam type, exterior, 12-24V
Components and Accessories	
CONNECTSET001	Connection set for PHOTO061, SENSEEDGE042 incl. 3' flexible conduit 3/16", junction box, hardware
INTERFACE001	Interface module enables the connection of monitored photoelectric cells to a Board or Electromechanical control without monit. function, compatible with PHOTO045M/061/065/070
INTERFACE003	Y-connect signal merging module, N4, compatible with 2 x monitored entrapment protection devices. Compatible primary devices: PHOTO061/065/070. Secondary devices: monitored photoelectric cells, light curtains, electric sensing edges and/or non-contact sensing edges
HOOD001	Sunlight reflection protection hood, compatible with PHOTO061 receiver unit
PHOTO072	Photoelectric cell reflector, compatible with PHOTO008D1/065
Monitored Light Curtains	
LIGHTCURTAIN001	Monitored, invisible curtain of protection 36" detection height, thru-beam type, IP67 incl., 12-24VAC/Vdc (10Vdc min.) 100mA max. at 24Vdc, 32' range
LIGHTCURTAIN002	Monitored, invisible curtain of protection 72" detection height, thru-beam type, IP67 incl., 12-24VAC/Vdc (10Vdc min.) 100mA max. at 24Vdc, 32' range
Components and Accessories	
INTERFACE003	Y-connect signal merging module, N4, compatible with 2 x monitored entrapment protection devices. Compatible primary devices: PHOTO061/065/070. Secondary devices: monitored photoelectric cells, light curtains, electric sensing edges and/or non-contact sensing edges
Monitored Electric Sensing Edges	
SENSEEDGE044UM	Monitored, electric edge ME-123, 10kOhms resistor, 2-wire, universal wire outlet location, vert./horiz. mount, for sectional doors/sliding gates/conveyors/presses, to be used with INTERFACE002
SENSEEDGE007UM	Monitored, electric edge ME-113, 10kOhms resistor, 2-wire, E/R/L/U wire outlet location, vert./horiz. mount, for sectional doors, to be used with INTERFACE002
SENSEEDGE018UM	Monitored, electric edge MT-22, 10kOhms resistor, 2-wire, E/R/L/U wire outlet location, horiz. mount, for rolling doors, to be used with INTERFACE002
SENSEEDGE042	Monitored, opto sensing edge, thru-beam type, incl. modular bumpers, to be used with HOSE010
SENSEEDGE046M	Monitored, electric edge, 10kOhms resistor, 2-wire, E/R/L wire outlet location, to be used with INTERFACE002
Components and Accessories	
CONNECTSET001	Connection set for PHOTO061, SENSEEDGE042 incl. 3' flexible conduit 3/16", junction box, hardware
INTERFACE002	Interface module for 10kOhms resistor edges, to be used with SENSEEDGE007UM/018UM/044UM/046M
INTERFACE003	Y-connect signal merging module, N4, compatible with 2 x monitored entrapment protection devices. Compatible primary devices: PHOTO061/065/070. Secondary devices: monitored photoelectric cells, light curtains, electric sensing edges and/or non-contact sensing edges
SENSEMOUNT001	C-mounting channel ME-123C (other shapes available \$)
SENSEMOUNT003	C-mounting channel ME-113C (other shapes available \$)
SENSLINK002	Monitored electric edge wireless link kit, incl. transmitter and receiver, compatible with SENSEEDGE007UM/018UM/044UM



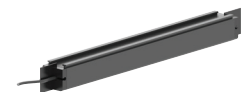
PHOTO061 - N4X



LIGHTCURTAIN001



SENSEEDGE044UM



SENSEEDGE007UM



CONNECTSET001

Note: Minimum length is 4'. Please note that these products are made-to-order, therefore no returns or exchanges will be accepted.

Note: When ordering, please specify your wire outlet location: End, Right, Left, Universal.

Entrapment Protection Devices

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Primary Monitored External Entrapment Protection Devices (Cont.)

! Manaras strongly recommends the use of external entrapment protection devices. The devices listed below connect to the specific MONIT terminals on BOARD070M.

Code	Description
Monitored Non-Contact Sensing Edges	
PHOTO067A	Monitored, optic sensing edge, Z-flap holder, thru-beam type, N4 Class 2 & IP65 encl., 8-30VAC/12-42VDC, 30' range
PHOTO068C	Monitored, optic sensing edge, thru-beam type, N4 Class 2 & IP65 encl., 8-30VAC/12-42VDC, 30' range (50' range available \$)
Components and Accessories	
INTERFACE003	Y-connect signal merging module, N4, compatible with 2 x monitored entrapment protection devices. Compatible primary devices: PHOTO061/065/070. Secondary devices: monitored photoelectric cells, light curtains, electric sensing edges and/or non-contact sensing edges



PHOTO068C

Ancillary External Entrapment Protection Devices

Ancillary (secondary) external entrapment protection devices are optional and may be used to supplement primary monitored external entrapment protection devices or constant-pressure-to-close operation.

Non-Monitored Photoelectric Cells	
PHOTO008C3	Non-monit., N4X encl., thru-beam type, indoor, 24V, 45' range, incl. interface module
PHOTO008D1	Non-monit., N4X encl., retro-refl. type, indoor, 24V, 5-50' range, incl. interface module
PHOTO008E1	Non-monit., N1 encl., thru-beam type, indoor, 24V, 5-45' range, incl. interface module
PHOTO075	Non-monit., IP67 encl., retro-refl. type, exterior, 24V, 0.5'-32' range
PHOTO060	Non-monit., N4/12 & IP67 encl., retro-refl. type, exterior, 39' range, incl. 3" Ø reflector
PHOTO077	Non-monit., IP67 encl., thru-beam type, exterior, 24V, 114-131' range
PHOTO045	Non-monit., N4X aluminum hood (PHOTO015), infrared thru-beam type, exterior, 12-24V
PHOTO073	Non-monit., intrinsically safe for hazardous locations, retro-refl. type, exterior, 5-15VDC, 30' range, incl. 3" Ø reflector
PHOTO059	Non-monit., infrared modulated thru-beam type, harsh industrial env., N4/7 Class I-Gr B/C/D, Class II-Gr E/F/G, Class III and IEC IP66, EExd IIC
Components and Accessories	
INTERFACE001	Interface module enables the connection of monitored photoelectric cells to a Board or Electromechanical control without monit. function, compatible with PHOTO045M/061/065/070
PHOTO024	Photoelectric cell reflector 3" Ø, compatible with PHOTO060
PHOTO072	Photoelectric cell reflector 2" x 3.5" x 0.5", compatible with PHOTO008D1/065
PHOTO074	Photoelectric cell reflector 3" Ø, compatible with PHOTO073
PHOTO076	Photoelectric cell reflector 2" x 2", compatible with PHOTO075

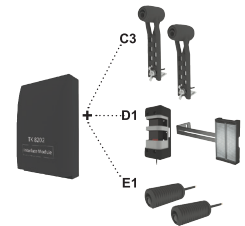


PHOTO008C3/D1/E1



PHOTO060



PHOTO077



INTERFACE005

Non-Monitored Light Curtains	
LIGHTCURTAIN003	Non-monit., invisible curtain of protection 36" detection height, thru-beam type, IP67 encl., 12-24VAC/VDC (10VDC min.) 100mA max. at 24VDC, 32' range, incl. INTERFACE005
LIGHTCURTAIN004	Non-monit., invisible curtain of protection 72" detection height, thru-beam type, IP67 encl., 12-24VAC/VDC (10VDC min.) 100mA max. at 24VDC, 32' range, incl. INTERFACE005

Components and Accessories	
INTERFACE005	Controller for LIGHTCURTAIN003/004, PHOTO067/068A/B

Entrapment Protection Devices

For additional information, availability or additional accessories not listed, please consult inside sales.

Ancillary External Entrapment Protection Devices (Cont.)

Code	Description
Non-Monitored Electric Sensing Edges	
SENSEEDGE044U	Non-monit., electric edge ME-123, 2-wire, universal wire outlet location, vert. /horiz. mount, for sectional doors /sliding gates /conveyors /presses
SENSEEDGE007	Non-monit., electric edge ME-113, 2-wire, E/R/L/U wire outlet location, vert. /horiz. mount, for sectional doors
SENSEEDGE021	Non-monit., electric edge MU-22, 2-wire, E/R/L wire outlet location, vert. /horiz. mount, for sectional /aircraft hangar doors (sliding)
SENSEEDGE040	Non-monit., electric edge MU-21, 2-wire, E/R/L/U wire outlet location, vert. /horiz. mount, for sectional doors
SENSEEDGE018U	Non-monit., electric edge MT-22, 2-wire, E/R/L/U wire outlet location, horiz. mount, for rolling doors
SENSEEDGE002	Non-monit., electric edge ME-110, 2-wire, E/R/L wire outlet location, vert. /horiz. mount, for counter shutters /emergency switches /conveyors syst. /rolling grilles /barrier arms
SENSEEDGE045	Air hose with rubber profile for pneumatic edge to be built in the field, soft rubber, 3/4" inside diameter, 1" outside diameter

Note: Minimum length is 4'. Please note that these products are made-to-order, therefore no returns or exchanges will be accepted.

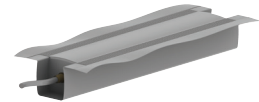
Note: When ordering, please specify your wire outlet location: End, Right, Left, Universal.

Note: Additional models available, including 4-wire electric edges. When ordering 4-wire electric edges, a fail safe sensing edge circuit (MOD004) must also be ordered (\$), consult inside sales.

Components and Accessories	
SENSEMOUNT001	C-mounting channel ME-123C (other shapes available \$)
SENSEMOUNT003	C-mounting channel ME-113C (other shapes available \$)
SENSEMOUNT004	C-mounting channel ME-110C (other shapes available \$)
REELITE005	Metal take-up reel, 2-wire, 18 gauge, 20' extension
REELITE003	Metal take-up reel, 3-wire, 16 gauge, 30' extension
COIL005	Coil cord, 2-wire, 18 gauge, 12' extension
COIL001	Coil cord, 2-wire, 18 gauge, 20' extension
COIL003	Coil cord, 4-wire, 18 gauge, 20' extension
COIL010	Coil cord, 4-wire, 18 gauge, 25' extension
COIL007	Coil cord, 3-wire, 18 gauge, 20' extension
HOSE010	Air hose with rubber profile, soft rubber, 3/4" inside diameter, 1" outside diameter, for AIRSWITCH016A, PNEUMATIC021A, SENSEEDGE045

Non-Monitored Non-Contact Sensing Edges	
PHOTO067	Non-monit. optic sensing edge, Z-flap holder, thru-beam type, N4 Class 2 & IP65 encl., 8-30VAC/12-42VDC, 30' range
PHOTO068A	Non-monit. optic sensing edge, thru-beam type, N4 Class 2 & IP65 encl., 8-30VAC/12-42VDC, 30' range (50' range available \$)

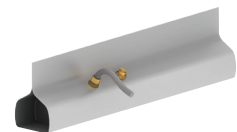
Components and Accessories	
INTERFACE005	Controller for LIGHTCURTAIN003/004, PHOTO067/068A/B



SENSEEDGE021



SENSEEDGE040



SENSEEDGE018U



SENSEMOUNT001

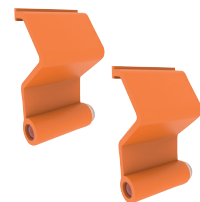


PHOTO067

Entrapment Protection Devices

For additional information, availability or additional accessories not listed, please consult inside sales.

N

Ancillary External Entrapment Protection Devices (Cont.)

Code

Description

Non-Monitored Pneumatic Sensing Edges and Kits

PNEUMATIC004	Pneumatic edge kit for doors up to 14' high, with SPDT air switch, 14' coil cord, hose plug
PNEUMATIC005	Pneumatic edge kit for doors up to 20' high, with SPDT air switch, 20' take-up reel, hose plug
PNEUMATIC009	Pneumatic edge kit for doors up to 30' high, with air switch, 30' take-up reel, hose plug
PNEUMATIC007	Pneumatic edge kit for doors up to 14' high, with air switch, 14' coil cord, hose plug
PNEUMATIC008	Pneumatic edge kit for doors up to 20' high, with air switch, 20' take-up reel, hose plug
PNEUMATIC017A	Pneumatic edge kit with N4/12 air switch, 30' 3-conductor take-up reel and accessories
PNEUMATIC021	Pneumatic edge kit with N4 wireless air switch, unipolar N.O. contact, hose plug and adapter
PNEUMATIC021A	Pneumatic edge kit with N4 wireless air switch, unipolar N.O. contact, end and angle plugs, compatible with HOSE010
PNEUMATIC006	Hazardous location pneumatic edge kit for doors up to 20' high, hazardous location air switch, 20' air coil, hose plug

Note: HOSE001 must be ordered separately according to door width + 2' for the pneumatic edge kits listed above.

Note: Weather stripping is not included with our pneumatic kits; it must be supplied by the door manufacturer.

Components and Accessories

HOSE001	Air hose, soft rubber, EPT/EPDM, 3/8" inside diameter, 9/16" outside diameter
HOSE009	Air hose, soft rubber, EPT/EPDM, 1/2" inside diameter, 3/4" outside diameter
HOSE010	Air hose with rubber profile, soft rubber, 3/4" inside diameter, 1" outside diameter, for AIRSWITCH016A, PNEUMATIC021A
PLUG005	Air hose plug for HOSE001
PLUG011	Air hose plug for HOSE010
PLUG012	Air hose plug for HOSE010
AIRSWITCH001	Air switch, hazardous location enclosure, N.O. contact, 2-wire output
AIRSWITCH007	Air switch, SPDT type N.O. & N.C. contacts, adjustable
AIRSWITCH008	Aluminum junction box for AIRSWITCH007
AIRSWITCH018	Air switch, SPDT type N.O. & N.C. contacts, ABS housing
AIRSWITCH015A	Air switch, SPDT type N.O. & N.C. contacts, N4X enclosure, incl. adapter for HOSE001/009
AIRSWITCH016A	Kit including IP65 rated air switch, SPST type unipolar N.O. contact, end and angle plugs, compatible with HOSE010
AIRSWITCH017	Airwave wireless N4 air switch transmitter and receiver units, 2-wire output N.O. contacts
AIRSWITCH019	Airwave wireless switch with embedded transmitter plus receiver
AIRSWITCH020	Airwave switch, N.O. contact, 2-wire output, ABS housing with silicone tubing
REELITE005	Metal take-up reel, 2-wire, 18 gauge, 20' extension
REELITE003	Metal take-up reel, 3-wire, 16 gauge, 30' extension
COIL005	Coil cord, 2-wire, 18 gauge, 12' extension
COIL001	Coil cord, 2-wire, 18 gauge, 20' extension
COIL003	Coil cord, 4-wire, 18 gauge, 20' extension
COIL010	Coil cord, 4-wire, 18 gauge, 25' extension
COIL007	Coil cord, 3-wire, 18 gauge, 20' extension
COILHOSE001	Recoil air hose with brass connector for PNEUMATIC006

Interface Modules

INTERFACE001	Interface module enables the connection of monitored photoelectric cells to a Board or Electromechanical control without monit. function, compatible with PHOTO045M/061/065/070
INTERFACE002	Interface module for 10kOhms resistor edges, to be used with SENSEEDGE007UM/018UM/044UM/046M
INTERFACE003	Y-connect signal merging module, N4, compatible with 2 x monitored entrapment protection devices. Compatible primary devices: PHOTO061/065/070. Secondary devices: monitored photoelectric cells, light curtains, electric sensing edges and/or non-contact sensing edges
INTERFACE005	Controller for LIGHTCURTAIN003/004, PHOTO067/068A/B



PNEUMATIC008



PNEUMATIC021A



AIRSWITCH015A



COIL005



INTERFACE002

Control Devices

For additional information, availability or additional accessories not listed, please consult inside sales.

Push-Button, Key Switch Control Stations

Code	Description
Push-Button Control Stations	
STATION001	Surface-mount, one button, Nema 1 encl., 1 N.O. contact
STATION081	Surface-mount, one button, Nema 4/12 & Nema 4X encl., 1 N.O. contact
STATION010	Surface-mount, two button, Nema 1 encl., 2 N.O. contacts ⁽¹⁾
STATION082	Surface-mount, two button, Nema 4/12 & Nema 4X encl., 2 N.O. contacts ⁽¹⁾
STATION020	Surface-mount, three button, Nema 1 encl., 2 N.O. contacts and 1 N.C. contact for stop
STATION078	Surface-mount, three button, Nema 4/12 & Nema 4X encl., 2 N.O. contacts and 1 N.C. contact for stop
STATION056	Surface-mount, three button, Nema 3R, 4,12 encl., 2 N.O. contacts and 1 N.C. contact for stop
STATION049	Surface-mount, three button, CSA certified/UL listed classified hazardous locations ⁽²⁾ , 2 N.O. contacts and 1 N.C. contact for stop
STATION079	Surface-mount, three button with key lock-out, Nema 4/12 & Nema 4X encl., 2 N.O. contacts and 1 N.C. contact for stop
STATION057	Surface-mount, three button with key lock-out, Nema 3R, 4,13 encl., 2 N.O. contacts and 1 N.C. contact for stop
STATION050	Surface-mount, three button with key lock-out, CSA certified/UL listed classified hazardous locations ⁽²⁾ , 2 N.O. contacts and 1 N.C. contact for stop
STATION080	Surface-mount, three button with key lock-out and pilot light, Nema 4/12 & Nema 4X encl., 2 N.O. contacts and 1 N.C. contact for stop
STATION070	Surface-mount, one mushroom head (green), Nema 4/12 & Nema 4X encl., spring return, 1 N.O. contact
STATION085A	Surface-mount, one mushroom head (red) emergency-stop, twist and lock, Nema 4/12 & Nema 4X encl., 1 N.C. contact
STATION085B	Surface-mount, one mushroom head (red) emergency-stop, push/pull, Nema 4/12 & Nema 4X encl., 1 N.C. contact
STATION086	Flush-mount, three button, Nema 1 encl., back box with bracket, 2 N.O. contacts and 1 N.C. contact for stop

⁽¹⁾ **Note:** Stop buttons are not provided on the two push-button stations. They should only be used with operators wired for constant pressure to open and close (D1 operating mode).

⁽²⁾ **Note:** Class I, Div.1&2, Groups C,D/Class I, Zones 1&2, Groups IIB, IIA/Class II, Div.1&2, Groups E,F,G/Class III, Nema 7 (C,D)/9 (E,F,G)

Components and Accessories	
KEY006	Replacement key for STATION079/080, KEYSWITCH050, set of two

Key Switch Control Stations	
KEYSWITCH015	Single key, open/close, exterior, cast iron encl, surface mount, center return, tamper-proof
KEYSWITCH017	Single key, 2-positions on/off, exterior, cast iron encl, surface mount, center return, tamper-proof
KEYSWITCH050	Single key, 2 positions on/off, N4/12-4X encl, 1 N.O. contact, surface mount
KEYSWITCH051	Single key, hazardous location encl., 1 N.O. contact and 1 N.C. contact, surface mount, key removable in both positions
KEYSWITCH019	Single key, open/close with stop button, exterior, aluminum die-cast encl, surface mount
KEYSWITCH034	Single key, open/close, N4 encl, 1 momentary N.O. contact, exterior, aluminum die-cast encl, wall, post, pipe or pedestal mount
KEYSWITCH010	Single key, open/close, Nema 1 encl, interior, flush mount, center return, tamper-proof

! Key switches without stop buttons should only be used with operators wired for constant pressure to open/close (D1 operating mode)

Components and Accessories	
KEYSWITCH006	Replacement cylinder (for KEYSWITCH034)
KEYSWITCH023	Replacement switch, SPST momentary N.O. contact, 6A at 125VAC, 3A at 250VAC (for KEYSWITCH034)
KEYSWITCH041	Replacement switch, SPDT momentary N.C. contact (for KEYSWITCH034)
KEY006	Replacement key for STATION079/080, KEYSWITCH050, set of two



STATION020



STATION078



STATION049



KEYSWITCH015



KEYSWITCH050



KEY006

Control Devices

For additional information, availability or additional accessories not listed, please consult inside sales.

Pull Switch Controls, Keypads, Card Readers

Code

Description

Pull Switch Controls

PULLCORD001	Pull-switch control, exterior, cast iron encl, SPDT preconfigured to use N.O. contact
PULLCORD002	Pull-switch control, exterior, cast iron encl, DPDT preconfigured to use N.O. contacts
PULLCORD003	Pull-switch control, swivel-type, exterior, cast iron encl, SPDT preconfigured to use N.O. contact
PULLCORD007	Pull-switch control, swivel-type, exterior, heated, SPST contact, universal mount

Note: Pull switches may be used as an open only or open/close control with B2 operating mode.

Keypads and Card Readers

KEYLESS042	Exterior digital keypad, operates up to 4 doors, SBC ⁽¹⁾ or open/close function, back-lit keys, weather resistant cover, 2-8 digit programmable personalized passcodes
CARDREADER017	Proximity card reader, inductive contact-less, waterproof, can be used as keypad control, up to 2000 users, 9-28Vdc input, 24Vdc from ECB, back-lit

Components and Accessories

POST001	Heavy gauge steel gooseneck post, 42"H, for pad mount
POWERBLOCK006	24Vdc 1A power supply
CARDREADER018	Access cards, reinforced, compatible with CARDREADER017
RECTIFIER011	Rectifier to generate 24Vdc from 24VAC, 1/4" tab terminals (without wire leads)



PULLCORD001



KEYLESS042

Control Devices

For additional information, availability or additional accessories not listed, please consult inside sales.

Radio Controls

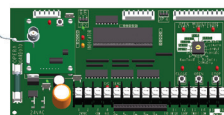
Code Description

Radio Controls (Commercial and Industrial)



Radio Receiver
On-Board

Operators equipped with BOARD070 manufactured as of November 2013 have an on-board receiver included. Radio transmitters and direct ECB plug-in receiver cards, featuring rolling code technology, are compatible with previous BOARD060 equipped or electromechanical operators and are available for purchase.



BOARD070
with radio receiver



RADIOEM103 SD/MD



RADIOEM102



RADIOEM104



RADIOEM144



RADIOEM901



RADIOEM903



RADIOEM901

Rolling Code Technology - Series 100 (390MHz)

RADIOEM101	Single-button transmitter, operates 1 door, SBC ⁽¹⁾ or open/close function
RADIOEM103SD	Three-button transmitter, operates 1 door, open/close/stop function
RADIOEM103MD	Three-button transmitter, operates up to 3 doors, SBC ⁽¹⁾ or open/close function
RADIOEM102	Three-button key chain transmitter, operates up to 3 doors, SBC ⁽¹⁾ or open/close function, or operates 1 door open/close/stop function
RADIOEM104	Four-button transmitter, operates up to 4 doors, SBC ⁽¹⁾ or open/close function
KEYLESS042	Exterior digital keypad, operates up to 4 doors, SBC ⁽¹⁾ or open/close function, back-lit keys, weather resistant cover, 2-8 digit programmable personalized passcodes
RADIOEM144	Three-button transmitter, operates up to 144 doors, open/close/stop function
RADIORE901	Commercial universal receiver, compatible with rolling code and fixed code (dip switch) tech., controls 1 operator, 50 transmitters max./receiver for rolling code (unlimited for fixed code)
RADIORE901A	Same as RADIORE901, includes commercial antenna for increased range
RADIORE901B	Same as RADIORE901, Nema 4/12-4X steel encl., incl. commercial receiver antenna
RADIORE102	External radio receiver, 1000 transmitters max./receiver
RADIOKIT004	Direct ECB plug-in receiver card kit RADIORE101C (on-site installation), 50 transmitters max./receiver for BOARD070 equipped operators

⁽¹⁾**Note:** SBC = Single Button Control. The SBC provides the user with the possibility to open, stop or close the door by using a single-button radio transmitter (or a single push-button station). Operators equipped with Electronic Control Board only.

Components and Accessories

CABLEKIT001	Commercial receiver antenna and 15' coaxial cable (20' coaxial cable available \$)
RADIO029	Commercial receiver antenna
CABLE015	Extension 15' coaxial cable for receiver antenna (20' coaxial cable available \$)

Dip Switch (Fixed Code) Technology - Series 900 (313MHz)

RADIOEM903	Three-button transmitter, operates up to 3 doors, SBC ⁽¹⁾ or open/close function
RADIOEM901	Single-button key chain transmitter, operates 1 door, SBC ⁽¹⁾ or open/close function
RADIOEM932	Three-button transmitter, operates up to 32 doors, open/close/stop function
RADIORE901	Commercial universal receiver, compatible with rolling code and fixed code (dip switch) tech., controls 1 operator, 50 transmitters max./receiver for rolling code (unlimited for fixed code)
RADIORE901A	Same as RADIORE901, includes commercial antenna for increased range
RADIORE901B	Same as RADIORE901, Nema 4/12-4X steel encl., incl. commercial receiver antenna

⁽¹⁾**Note:** SBC = Single Button Control. The SBC provides the user with the possibility to open, stop or close the door by using a single-button radio transmitter (or a single push-button station). Operators equipped with Electronic Control Board only.

Note: Series 900 Dip-Switch transmitters/receivers are not compatible with Series 100 Rolling Code transmitters/receivers (except for RADIORE901/901A/901B).

Note: Series 900 Dip-Switch transmitters/receivers are compatible with Manaras Series "0" Dip-Switch transmitters/receivers.

Components and Accessories

CABLEKIT001	Commercial receiver antenna and 15' coaxial cable (20' coaxial cable available \$)
RADIO029	Commercial receiver antenna
CABLE015	Extension 15' coaxial cable for receiver antenna (20' coaxial cable available \$)



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Specifications and design modifications subject to change without prior notice. PL.CAD.2021.05.03.R0

Control Devices

For additional information, availability or additional accessories not listed, please consult inside sales.

Wi-Fi Control Devices

Code

Description

Manaras Internet Control™



The Manaras Internet Control™ (MIC) device allows you to control and monitor your garage door from anywhere with the use of the MIC app and your smart device (iOS or Android).

MIC001

Includes Manaras Internet Control™ (MIC) device and ECB BOARD070M with integrated MIC Wi-Fi compatibility software (factory installed); to be purchased and used with a monitored "M" type Manaras operator

Features

- Control and monitor your garage door operator remotely
- Manage the ins and the outs of your facility
- Download the free MIC Manaras Internet Control™ app for iOS and Android
- Easy connection and pairing of the MIC device with your garage door operator
- Share access with multiple users, with either temporary access or permanent access
- Get real time push notification alerts when door is open or closed
- Safety warning signal and flashing light alert prior to door closing
- One MIC device per operator
- The MIC App monitors multiple doors on one platform

Required

- 2 GHz Wi-Fi connection
- Smart device (iOS or Android)
- To be used with a monitored "M" type Manaras operator
- ECB BOARD070M with integrated MIC Wi-Fi compatibility
- Monitored photoelectric cells



MIC001

Retro-Fit Kits

MODKITMIC001A

Retro-fit kit for in-field "M" type operators already equipped with monitored photoelectric cells; incl. Manaras Internet Control™ device MIC001 and ECB BOARD070M with integrated MIC Wi-Fi compatibility software

MODKITMIC001B

Retro-fit kit for in-field "E" type operators⁽¹⁾; incl. Manaras Internet Control™ device MIC001, Nema 1 monitored photoelectric cells PHOTO070, ECB BOARD070M with integrated MIC Wi-Fi compatibility software

MODKITMIC001C

Retro-fit kit for in-field "E" type operators⁽¹⁾; incl. Manaras Internet Control™ device MIC001, Nema 4X monitored photoelectric cells PHOTO061, ECB BOARD070M with integrated MIC Wi-Fi compatibility software

MODKITMIC001D

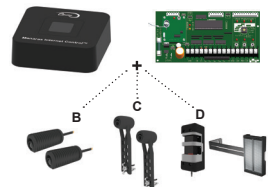
Retro-fit kit for in-field "E" type operators⁽¹⁾; incl. Manaras Internet Control™ device MIC001, Nema 4X monitored retro-reflective type photoelectric cells PHOTO065, ECB BOARD070M with integrated MIC WiFi capability software

⁽¹⁾ **Note:** This kit will transform "E" type operators into monitored "M" operators.

Note: Local data rates may apply when using the MIC app.



MODKITMIC001A



MODKITMIC001B/C/D

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Specifications and design modifications subject to change without prior notice. PL.CAD.2021.05.03.R0

Vehicle Management

For additional information, availability or additional accessories not listed, please consult inside sales.

Loop, Motion & Presence Detectors

Code	Description
Loop Detectors	
LOOP035A	Single inductive loop detector module incl. harness, 9VDC-240VAC universal voltage, dual relay output
LOOP015	Pre-formed inductive loop, pave-over style 50' of wire lead, 8' x 4' cut-out area
LOOP027	Pre-formed inductive loop, saw-cut style 50' of wire lead, 8' x 4' cut-out area
Note: Loop detectors are used to detect the presence or passage of a vehicle. To be used in conjunction with an inductive wire loop embedded in the pavement. Open only control or as a reverse and hold open control for an operator with B2, C2 or timer to close operating mode.	
Components and Accessories	
RELAY021	Socket base for loop detector module, 300VAC 11-pin
Motion and Presence Detectors	
MOTION003	Motion detector, 12-24VAC/VDC, bi-directional, Nema 4, mounting 6.5' to 11.5', incl. remote control for long distance programming and 2 AAA batteries. Available for mounting 11.5' to 23' (MOTION003A)
MOTION003E	Motion/presence detector (laser technology), 10-35VDC, Nema 4/IP65, bi-directional, incl. remote control for long distance programming and 2 AAA batteries
MOTION003B	Motion/presence detector (microwave & infrared technology), 42VAC/VDC, Nema 4, mounting 8' to 16', incl. remote control for long distance programming and 2 AAA batteries. Available for mounting 6.5' to 11.5' (MOTION003C)
MOTION003D	Presence detector, 12-24VAC/12-30VDC, IP54, mounting 6.5' to 11.5', incl. remote control for long distance programming and 2 AAA batteries
MOTION004	Motion detector (microwave technology), 12-24VAC/DC, bi-directional or unidirectional settings, IP64, mounting 20' max height, 20'x33' max detection field.
TREADLE002	Pneumatic (forced air) treadle kit, 10' signal hose, exterior SPDT air switch and hose plug
TREADLE002A	Pneumatic (forced air) treadle kit, Nema 4X air switch, 10' signal hose, exterior SPDT air switch and hose plug
Note: Motion/presence detectors function to detect the motion and/or presence of vehicles or pedestrians in a wide area in front of the door. They can give an open or reversing command for an operator. When using a treadle hose, the weight of a vehicle activates a contact which can give an open or reversing command to the operator (no power is needed).	
Components and Accessories	
MOTION010	Motion detector, 12-24VAC/VDC, Nema 4, bi-directional, mounting 6.5' to 11.5'. Available for mounting 11.5' to 23' (MOTION011)
MOTION013	Motion/presence detector (laser technology), 10-35VDC, Nema 4/IP65, bi-directional
MOTION014	Motion/presence detector (microwave & infrared technology), 42VAC/VDC, Nema 4, mounting 8' to 16'. Available for mounting 6.5' to 11.5' (MOTION014A)
MOTION015	Presence detector, 12-24VAC/12-30VDC, IP54, mounting 6.5' to 11.5'
MOTION012	Universal remote control for long distance programming, incl. 2AAA batteries
AIRSWITCH018	Air switch, SPDT type N.O. & N.C. contacts, ABS housing
AIRSWITCH015A	Air switch, SPDT type N.O. & N.C. contacts, N4X enclosure, incl. adapter for HOSE001/009
ADAPTER051	Connection adapter, compatible with AIRSWITCH015/017, HOSE001/009
HOSE001	Air hose, soft rubber, EPT/EPDM, 3/8" inside diameter, 9/16" outside diameter
HOSE009	Air hose, soft rubber, EPT/EPDM, 1/2" inside diameter, 3/4" outside diameter
PLUG005	Air hose plug for HOSE001
PLUG023	Air hose plug with hole, compatible with HOSE001/009



LOOP035A



MOTION003



MOTION003E



TREADLE002

Vehicle Management

For additional information, availability or additional accessories not listed, please consult inside sales.

Audible & Visible Warning Devices

Code

Description

Traffic Lights & LED Light Strips

TRAFFIC028A	Red LED 8" traffic light kit, incl. mounting support kit, 120VAC
TRAFFIC033A	Green LED 8" traffic light kit, incl. mounting support kit, 120VAC
TRAFFIC049A	Yellow LED 8" traffic light kit, incl. mounting support kit, 120VAC
TRAFFIC029A	Red and green LED 8" traffic light kit, incl. mounting support kit, 120VAC
TRAFFIC029B	Red and green LED 8" traffic light kit, incl. mounting support kit, 24VDC
TRAFFIC036A	Red and green LED 4-1/4" traffic lights, yellow casing, 120VAC
TRAFFIC036B	Red and green LED 4-1/4" traffic lights, black casing, 120VAC
TRAFFIC037A	Red and green LED 4-1/4" traffic lights, yellow casing, 24VDC
TRAFFIC037B	Red and green LED 4-1/4" traffic lights, black casing, 24VDC
TRAFFIC046A	Red and green LED 3-3/4" traffic lights, yellow casing, 120VAC
TRAFFIC046B	Red and green LED 3-3/4" traffic lights, black casing, 120VAC
TRAFFIC047A	Red and green LED 3-3/4" traffic lights, yellow casing, 24VDC
TRAFFIC047B	Red and green LED 3-3/4" traffic lights, black casing, 24VDC
TRAFFIC038	Red, yellow and green LED 8" traffic light kit, incl. mounting support kit, black casing, 120VAC
TRAFFIC040	Red, yellow and green LED 8" traffic light kit, incl. mounting support kit, black casing, 24VDC
LEDSTRIP001	LED light strip (1 unit), red/green/blue, 14", 24VDC
LEDSTRIP002	LED light strip (1 unit), red/green/blue, 27", 24VDC
LEDSTRIP003	LED light strip (1 unit), red/green/blue, 46", 24VDC
LEDSTRIP004	LED light strip (1 unit), red/green/blue, 96", 24VDC
LEDSTRIP006	LED light strip (1 unit), red/green/blue, 120", 24VDC

Components and Accessories

TRAFFIC007A	Red LED 8" replacement bulb and lens, 120VAC
TRAFFIC008A	Yellow LED 8" replacement bulb and lens, 120VAC
TRAFFIC009A	Green LED 8" replacement bulb and lens, 120VAC
MODKIT027B1	Universal auxiliary output module, BOARD070, 24VDC
MODKIT027D1	Universal auxiliary output module, BOARD070, Rapido®, 24VDC
MODKIT168A	Auxiliary output module, enables connection of 24VDC, LED light strips

Beacons, Horns & Strobes

BEACON012A	Rotating red beacon light 24VAC/VDC, incl. bracket
BEACON012B	Rotating amber beacon light 24VAC/VDC, incl. bracket
BEACON013A	Rotating red beacon light 120VAC, incl. bracket
BEACON013B	Rotating amber beacon light 120VAC, incl. bracket
HORN015	White horn/strobe, weatherproof backbox, incl. rectifier, 24VDC
HORN019	Buzzer 95DBA 120VAC
HORN020	Buzzer 95DBA 24VDC

Components and Accessories

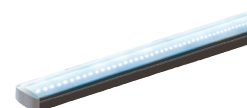
RECTIFIER011	Rectifier to generate 24VDC from 24VAC, without wire leads
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TRAFFIC028A



TRAFFIC037A



LEDSTRIP001



BEACON012A/012B



HORN015

Miscellaneous Specialty Items

For additional information, availability or additional accessories not listed, please consult inside sales.

Miscellaneous & Specialty Items

Code	Description
Miscellaneous Control Equipment	
EGRESSKIT001	Emergency egress control device for quick disconnect of operators (models OPJ, OHJ) in case of an emergency, incl. handle (flush with face plate), 15' cable, S-hook
INTERLOCK004	Door interlock switch for rolling grilles, interior flush mount, 1 N.C. contact
INTERLOCK005	Door interlock switch for sectional doors, rail mount, 1 N.C. contact
MODKIT012	Non-resettable cycle-counter kit, electromechanical controlled operators, 6-digits, tamper proof, 24VAC
MODKIT012B	Non-resettable cycle-counter kit, electronic controlled operators, 6-digits, tamper-proof, 24VAC



EGRESSKIT001

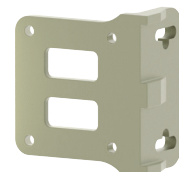
Mounting Accessories and Hardware	
SPREADER001	Chain spreader 1"/1", incl. 2 shaft collars and set screws ⁽¹⁾
SPREADER002	Chain spreader 1"/1-1/4", incl. 2 shaft collars and set screws ⁽¹⁾
SPREADER003	Chain spreader 1-1/4"/1-1/4", incl. 2 shaft collars and set screws ⁽¹⁾

⁽¹⁾**Note:** Chain spreaders are not available for applications above 1.5HP.

BRACKET111	Cast steel hood angle mounting bracket - Applies to OMJ, OMH, OPJ, OPH, OHJ, OSH, OGH
BRACKET112	Wall mounting bracket, incl. steel plate with 4 studs - Applies to OMJ, OMH, OPJ, OPH, OHJ, OSH, OGH
ISOLATOR004	Vibration reducing mounting kit, V-belt jackshaft Opera brand of operators



SPREADER001



BRACKET111

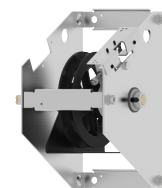
Splash Proof and Protective Covers	
SPLASH001	Splash proof operator cover 28" H x 21" W x 22" D - Applies to OGH & MGH up to 2HP, W/C
SPLASH003	Splash proof operator cover 30" H x 22" W x 16" D - Applies to OPJ, OPH, OHJ, OSH, W/C
SPLASH005	Splash proof operator cover 17" H x 27" L x 15" D - Applies to OMT, OTH/OTHW/C, OTBH/OTBHW/C
MODKIT148	Birds nest protection kit - OTH, OTBH, OSL



SPLASH003

Hand Chain and Chain Kits	
CHAIN002	Pocket wheel hand chain, yellow zinc plated
CHAINKIT002A	Disconnect chain kit 14' extension, white zinc plated, incl. S-hook
CHAINKIT004	Disconnect chain kit 28' extension, white zinc plated, incl. S-hook
CHAINKEEPER001	Chain keeper for hand chain
CHAINKEEPER002	Chain keeper for disconnect chain

Hand Cranks and Manual Chain Hoists	
CRANK009	Hand crank, 4' long
CRANK010	Hand crank, 6.5' long
MODKIT066	Chain hoist for manual hand operation of sectional doors, incl. 41B36x1 door sprocket, 6' #41 roller chain
MODKIT066WC	Chain hoist for manual hand operation of sectional doors, incl. 41B36x1 door sprocket, 6' #41 waterproof roller chain
HOIST002	Self-engaging manual hoist for sectional doors, hoist directly drives door shaft with #41 chain, door shaft sprocket and #41 chain sold separately (\$)
HOIST003	Chain hoist for manual hand operation of sectional or light rolling doors, equipped with self-braking band brake, 4:1 reduction, for 1" door shaft Ø
HOIST003A	Chain hoist for manual hand operation of sectional or light rolling doors, equipped with self-braking band brake, 4:1 reduction, for 1-1/4" door shaft Ø



HOIST002

Replacement Components

For additional information, availability or additional accessories not listed, please consult inside sales.

Standard Hardware

Code	Description
CABLE008	Disconnect cable, 25'
CARRIAGE006	Trolley carriage, alum. die cast
CARRIAGE009	Trolley carriage, Silencio®
CHAIN002	Hoist chain, yellow zinc plated
CHAIN013	Chain #41
CHAIN014	#41 chain pkg, NP, 10'
CHAIN027	#41 trolley chain pkg, 4'
CHAIN029	#40 trolley chain pkg NP, 10'
CHAIN031	Jackshaft drive chain #50 5' c/w link
CHAIN034	#50 chain pkg NP, 10'
CHAIN036	#60 chain pkg, 10'
CHAIN094	Stainless steel (304) hand chain
CHAIN098	#41 WP chain pkg, 10'
CHAIN099	#50 WP chain pkg, 5'
CHAIN100	#41 WP chain
CHAINKEEPER001	Chain keeper for hand chain
CHAINKEEPER002	Chain keeper for disconnect chain
CHAINKIT001	Disconnect chain kit 14'
CHAINKIT002A	Disconnect chain kit 14' extension
CHAINKIT004	Disconnect chain kit 28' extension
DISCONNECT001	Floor level disconnect lever
DOORARM001	Door lifting arm assembly
FRONTIDLER006	#41 very heavy-duty front idler
FRONTIDLER007	#48 (#410) front idler assembly
FRONTIDLER009	#48 (#410) very heavy-duty front idler
FRONTIDLER010	#41 front idler assembly
HD1-HBAG	Jackshaft hardware bag
ISOLATOR006	Mount isolator for Silencio®
SHAFT017	Spacer for trolley tracks
SPR41B12X1	Spr. 41B12 1" bore 1/4" kw
SPR41B14X1	Spr. 41B14 1" bore 1/4" kw
SPR41B18X1	Spr. 41B18 1" bore 1/4" kw
SPR41B23X1	Spr. 41B23 1" bore 1/4" kw
SPR41B36X1	Spr. 41B36 1" bore 1/4" kw
SPR41B48X1	Spr. 41B48 1" bore 1/4" kw
SPR50B12X1 & 11/4	Spr. 50B12 1" & 1-1/4" bore 1/4" kw
SPR50B14X1	Spr. 50B14 1" bore 1/4" kw
SPR50B18X1 & 11/4	Spr. 50B18 1" & 1-1/4" bore 1/4" kw
SPR50B23X1 & 11/4	Spr. 50B23 1" & 1-1/4" bore 1/4" kw
SPR50B36X1	Spr. 50B36 1" bore 1/4" kw
SPR50B42X1 & 11/4	Spr. 50B42 1" & 1-1/4" bore 1/4" kw
SPR50B54X1 & 11/4	Spr. 50B54 1" & 1-1/4" bore 1/4" kw
SPR50B60X1 & 11/4	Spr. 50B60 1" & 1-1/4" bore 1/4" kw
SPR50B72X11/4	Spr. 50B72 1-1/4" bore 1/4" kw
SPR60B12X1 & 11/4	Spr. 60B12, 1" & 1-1/4" bore, 1/4" kw
SPR60B15X13/8	Spr. 60B15, 1-3/8" bore, 5/16" kw
T2-HBAG	Trolley hardware bag
TL-BAG001	Track link hardware for >20'
TRACK001	One galvanized track 2"x2"x9'6"
TRACK002	One galvanized track 2"x2"x10'6"
TRACK003	One galvanized track 2"x2"x12'6"
TRACK004	One galvanized track 2"x2"x14'6"
TRACK005	One galvanized track 2"x2"x16'6"
TRACK006	One galvanized track 2"x2"x18'6"
TRACK007	One galvanized track 2"x2"x20'6"

Electric Motors

Code	Description
Instant reverse, medium-duty, 120V 1Ph, 60Hz, 1/2HP	
MOTOR189	1050 rpm, OMT, MLJ, MLH, MLT
MOTOR403	1500 rpm, OMJ/OMH
Instant reverse, intermittent-duty, 1/2HP, 120/240V, 1Ph, 60Hz For MTBL, MJ, MJH, MTH, MTBH. Motor relay not required.	
MOTOR009	1725 rpm, built-in reset
Continuous-duty, base mount, ODP, 60Hz	
MOTOR254	1/2HP, 120/240V, 1Ph
MOTOR255	3/4HP, 120/240V, 1Ph
MOTOR256	1HP, 120/240V, 1Ph
MOTOR271	1/2HP, 208/480V, 3Ph
MOTOR273	3/4HP, 208/480V, 3Ph
MOTOR275	1HP, 208/480V, 3Ph
MOTOR272	1/2HP, 600V, 3Ph
MOTOR274	3/4HP, 600V, 3Ph
MOTOR276	1HP, 575V, 3Ph
Continuous-duty, C-flange, ODP, 60Hz	
MOTOR336	1/2HP, 120/240V, 1Ph
MOTOR337	3/4HP, 120/240V, 1Ph
MOTOR350	1HP, 120/240V, 1Ph
MOTOR355	1-1/2HP, 120/240V, 1Ph
MOTOR357	1/2HP, 208/480V, 3Ph
MOTOR358	3/4HP, 208/480V, 3Ph
MOTOR359	1HP, 208/480V, 3Ph
MOTOR361	1-1/2HP, 208/480V, 3Ph
MOTOR383	2HP, 208/480V, 3Ph
MOTOR384	3/4HP, 600V, 3Ph
MOTOR385	1HP, 600V, 3Ph
MOTOR386	1-1/2HP, 600V, 3Ph
MOTOR387	2HP, 600V, 3Ph
Continuous-duty, base mount, TEFC, 60 Hz. For Nema 4/12 type appl.	
MOTOR257	1/2HP, 120/240V, 1Ph
MOTOR258	3/4HP, 120/240V, 1Ph
MOTOR259	1HP, 120/240V, 1Ph
MOTOR277	1/2HP, 208/480V, 3Ph
MOTOR279	3/4HP, 208/480V, 3Ph
MOTOR281	1HP, 208/480V, 3Ph
MOTOR280	3/4HP, 600V, 3Ph
MOTOR282	1HP, 600V, 3Ph
Continuous-duty, C-Flange, TEFC, 60Hz	
MOTOR316	1/2HP, 120/240V, 1Ph
MOTOR318	1HP, 120/240V, 1Ph
MOTOR319	1-1/2HP, 120/240V, 1Ph
MOTOR262	3/4HP, 208/480V, 3Ph
MOTOR264	1HP, 208/480V, 3Ph
MOTOR476	1-1/2HP, 208/480V, 3Ph
MOTOR268	2HP, 208/480V, 3Ph
MOTOR263	3/4HP, 600V, 3Ph
MOTOR265	1HP, 600V, 3Ph
MOTOR270	2HP, 600V, 3Ph



Replacement Components

For additional information, availability or additional accessories not listed, please consult inside sales.

Brakes & Brake Components

Code	Description
BRAKE011	Band brake assembly kit OTBH, OSL
BRAKE011A	Band brake assembly kit OTBH, OSL, OTBHW, OSLW
BRAKE011B	Band brake assembly kit OTBH, OSL, OTBHC, OSLC
BRAKE012	Band brake retrofit kit GH/MGH
BRAKE013	Band brake assembly kit OSH/MSJ
BRAKE013A	Band brake assembly kit OSHW/MSJW
BRAKE013B	Band brake assembly kit OSHC/MSJC
BRAKE014A-D	Drum-shoe brake kit OTBH (w/ solenoid)
BRAKE015A-D	Drum-shoe brake kit OTBH-A.05 (w/ solenoid)
BRAKE016	Band brake assembly kit RSH, RVH, RTBH
BRAKEPART016	Brake pad assembly MLT, MLJ, MLH
BRAKEPART018	Brake shoe assembly kit (SHOE001/002)
BRAKEPART019KIT	Brake band assembly std brake
BRAKEPART020	Brake shoe assembly kit (SHOE021/022)
BRAKEPART021KIT	Band brake assembly kit RSH, RVH, RTBH
BRKIT001	Brake resistor for 120V
BRKIT002	Brake resistor for 240V
DRUM005	Steel brake drum 5/8"
DRUM006	Steel brake drum flat track 5/8"
MODKIT111	Solenoid brake kit OPJ

Capacitors

CAPACITOR030R	270-324µF capacitor, incl. bleeder resistor
CAPACITOR031R	324-389µF capacitor, incl. bleeder resistor
CAPACITOR015R	340-408µF capacitor, incl. bleeder resistor
CAPACITOR008R	540-648µF capacitor, incl. bleeder resistor
CAPACITOR024	70µF, 250VAC, 50/60Hz capacitor

Contactors (Reversing)

CONTACTOR003	Repl. kit rev contactor 16A-24VAC
CONTACTOR041	Reversing contactor 1Ph-9A-24VAC
CONTACTOR042	Reversing contactor 3Ph-9A-24VAC
CONTACTOR043	Reversing contactor 16A-24VAC
CONTACTOR044	Telemecanique contactor 12A-24VAC
CONTACTOR045	Telemecanique contactor 18A-24VAC

Electronic Control Boards

BOARD075M	Repl. board kit (monitoring)
BOARD075E	Repl. board kit (no monitoring)
BOARD070MR	Repl. control board (monitoring)
BOARD070ER	Repl. control board (no monitoring)
BOARD066R	Repl. univ. power board BOARD070 & prev
BOARD065	Repl. univ. board kit BOARD060 & prev
BOARD070MRSH12R	Repl. control board RSH/RMSJ/RTBH 12V
BOARD070MRSH24R	Repl. control board RSH/RMSJ/RTBH 24V
BOARD070MRVH12R	Repl. control board RVH 12V
BOARD070MRVH24R	Repl. control board RVH 24V
MODKIT027	Univ. aux. output module B060
MODKIT027B1	Univ. aux. output module B070
MODKIT027D1	Univ. aux. output module B070, Rapido®
MODKIT168A	Aux. output module for LED light strips

Limit Switches

Code	Description
LIMIT006	Cherry, micro, SPDT, flat lever
LIMIT015	Cherry, SPDT, no act
LIMIT016	Cherry SPDT, ext. stroke
LIMIT018	Cherry, dble, 2xSPDT, no act
LIMIT020	Unimax, snap-act, SPDT, no act
LIMIT021	Unimax, snap-act, SPDT, flat lever
LIMIT023	Unimax, snap-act, SPDT, lever 46°
LIMIT024	Unimax, dble, snap-act sw, 2xSPDT, flat
LIMIT024A	Unimax, dble, snap-act sw, 2xSPDT, 46°
LIMIT025	Unimax, snap-act, SPDT, flat lever
LIMIT025A	Unimax, snap-act, SPDT, "S" lever
LIMIT025B	Unimax, snap-act, SPDT, "end-bend"
CAP007	Limit switch button cap
MODKIT008AA	Open/Close extra double limits

Mountshafts & Components

MOUNTSHAFT020	Clutch shaft kit OPJ
MOUNTSHAFT023	Clutch & shaft kit OMJ
MOUNTSHAFT022	Clutch & shaft kit OMH
MOUNTSHAFT014	Clutch & hoist shaft kit OPH
MOUNTSHAFT014A	Clutch & hoist shaft kit OPHW, OPHC
MOUNTSHAFT016	Clutch & hoist shaft kit OSH/MSJ
MOUNTSHAFT016A	Clutch & hoist shaft kit OSH/MSJ, W/C
MOUNTSHAFT021	Clutch shaft kit OMT/MLT
MOUNTSHAFT007	Clutch shaft kit 5/8"D MTH, MTBH, MSL, OTH, OTBH, OSL, W/C/X versions
MOUNTSHAFT017	Clutch shaft kit 1"D MTH/MTBH (no pulley)
MOUNTSHAFT012	Clutch shaft kit MSJ (pre-2019)
MOUNTSHAFT001A	Clutch shaft kit MJH
MOUNTSHAFT001	Clutch shaft kit MJH (pre-1998)
MOUNTSHAFT009	Clutch shaft kit MAPT/MTBL 18UNF
MOUNTSHAFT009A	Clutch shaft kit MAPT/MTBL 24UNF
MOUNTSHAFT015	Hoist shaft kit OGH
MOUNTSHAFT013	Hoist shaft kit GH/MGH
MOUNTSHAFT010A	Hoist shaft kit MJH
MOUNTSHAFT010	Hoist shaft kit MJH (pre-1998)
MOUNTSHAFT018	Limit shaft kit Opera
MOUNTSHAFT018A	Limit shaft kit MGH up to 1.5HP
MOUNTSHAFT018B	Limit shaft kit MGH 2,3,5HP
MOUNTSHAFT018C	Limit shaft kit MGH (pre-2011) up to 1.5HP
MOUNTSHAFT018D	Limit shaft kit MGH (pre-2011) 2,3,5HP
MOUNTSHAFT018E	Limit shaft kit op. w/ damp/corrosive env.
MOUNTSHAFT018F	Limit shaft kit MTH/MTBH/MSJ (pre-2012)
MOUNTSHAFT018G	Limit shaft kit OTH/OTBH
MOUNTSHAFT025A	Clutch shaft kit MSJ
MOUNTSHAFT025B	Intermediary shaft kit MSJ
CLUTCH001	Friction clutch 1" #50 GH up to 1HP
CLUTCH002	Friction clutch 1" #60 GH up to 1HP
CLUTCH003	Friction clutch 1-1/4" #50 MGH .5-1.5HP
CLUTCH004	Friction clutch 1-1/4" #60 MGH .5-1.5HP
CLUTCH005	Friction clutch 1-3/8" #50 MGH 2,3,5HP
CLUTCH006	Friction clutch 1-3/8" #60 MGH 2,3,5HP
CLUTCH007	Friction clutch 1-1/4" #50 OGH
CLUTCH008	Friction clutch 1-1/4" #60 OGH
CLUTCHPAD005	Clutch pad ID 5/8" - OD 4"
CLUTCHPAD007	Clutch pad ID 1-3/4" - OD 5"
CLUTCHPAD008	Clutch pad ID 1" - OD 4"

Replacement Components

For additional information, availability or additional accessories not listed, please consult inside sales.

Mountshafts & Components (Cont.)

Code	Description
POCKETWHEEL005	Clutch pad ID 5/8" - OD 4"
POCKETWHEEL007	Pocketwheel assembly Opera
PULLEY014	Motor pulley standard 2" x 5/8" 5L/B
PULLEY020	Motor pulley 7" x 5/8", incl. in MOUNTSHAFT001/001A/007/011/014
MODKIT074A/B	Hand crank modification kit 4'/6.5' ⁽¹⁾
MODKIT112	Limit shaft speed-up kit for in field upgr.

Overloads - 1 Phase

RESET001	Resettable fuse 4A
RESET002	Resettable fuse 5A
RESET003	Resettable fuse 6A
RESET004	Resettable fuse 7A
RESET005	Resettable fuse 8A
RESET006	Resettable fuse 9A
RESET007	Resettable fuse 10A
RESET010	Resettable fuse 13A
RESET012	Resettable fuse 15A
RESET014	Resettable fuse 17A

Overloads - 3 Phase

OVERLOAD002	Telemecanique, 1.2-1.8A
OVERLOAD003	Telemecanique, 1.8-2.6A
OVERLOAD026	Telemecanique, 2.6-3.7A
OVERLOAD029	Telemecanique, 3.7-5.5A
OVERLOAD041	Telemecanique, 5.5-8.0A
OVERLOAD042	Telemecanique, 8.0-11.5A
OVERLOAD019	Telemecanique overload base

Relays

RELAY024	Relay DPDT 24VAC
RELAY026	Relay DPDT 120VAC
RELAY027	Relay DPDT 240VAC
RELAY039	Relay 3 pole 24VAC
RELAY068	Relay SPST 24Vdc

Solenoids

SOLENOID001	120V 60Hz laminated solenoid
SOLENOID002	240V 60Hz laminated solenoid
SOLENOID003	440V 60Hz laminated solenoid
SOLENOID004	575V 60Hz laminated solenoid
SOLENOID008	380V 50/60Hz laminated solenoid
SOLENOID012	208V 60Hz laminated solenoid

Transformers - Class II 24VAc

TRANSF143	120/240-24V, 40VA
TRANSF037	240/208-24V, 40VA
TRANSF088	480-24V, 40VA
TRANSF142	575-24V, 40VA
TRANSF006	120-24V, 50VA (mini)
TRANSF016	208-24V, 50VA (mini)
TRANSF130	240-24V, 50VA (mini)

Transformers - Class II 24VAc (Cont.)

Code	Description
TRANSF089	480-24V, 50VA (mini)
TRANSF112	575-24V, 50VA (mini)
TRANSF003	120-24V, 100VA
TRANSF017	208-24V, 100VA
TRANSF050	240-24V, 100VA
TRANSF087	480-24V, 100VA
TRANSF107	575-24V, 100VA
PAN-TX-001A	480V-1PH to 240V-1PH, 2000VA
PAN-TX-001B	600V-1PH to 240V-1PH, 2000VA

Timers & Counters

TIMER033	Timer 24VAC/Vdc, 8-pins
TIMER031	Timer 120/240V, 1s-100h, 8-pins
RELAY022	Socket base for TIMER031/TIMER033
TIMER011	Time delay 24-110V, 0.5s
TIMER034	Time delay 24V, 1.5s
TIMER014	Time delay 0-1023s
TIMER016	Dual timer 24V, 0-230s
TIMER032	Digital timer 24V, 7d
MODKIT003	Time delay kit, 1.5s
MODKIT013	Timer to close kit, 0s-100h
MODKIT013A	Timer to close kit, 0s-100h, med-duty
CYCLE006	Non-resettable counter, panel mount
CYCLE011	N4 non-resettable counter, flush mount
MODKIT012	Non-resettable cycle counter kit, HW ops
MODKIT012B	Non-resettable cycle counter kit, ECB ops

V-Belts

VBELTA24	V-belt, 24", type A, MLT
VBELTA30	V-belt, 30", type A, OTH/OTBH-A.00
VBELTA32	V-belt, 32", type A, MTH/MTBH APE, APT
VBELTA34	V-belt, 34", type A, MJ/MJH
VBELTAX30	V-belt, AX coggod type, OTBH-A.05, OTH/OTBH-A.06
VBELTB26	V-belt 5L, 26", type B, OMJ, OMH
VBELTB29	V-belt 5L, 29", type B, OPJ, OHJ, OPH, OSH
VBELTB30	V-belt, 30", type B, OTH, OTBH, OSL
VBELTB32	V-belt, 32", type B, MTH, MTBH, MSL
VBELTBX30	V-belt, BX coggod type, OSH-DR, RSH
VBELTBX32	V-belt, BX coggod type, RTBH, RTBHW/C

Miscellaneous

FUSE006	2A fuse
INTERLOCK004	Door interlock switch for rolling grilles
INTERLOCK005	Door interlock switch for sectional doors
MODKIT004	Fail safe sensing edge circuit kit
MODKIT011	Long distance control wiring kit
MODKIT064B	Trolley hoist #410 brake release kit ⁽¹⁾
MODKIT065B	Trolley hoist #41 brake release kit ⁽¹⁾
MODKIT141	Trolley drive chain guard kit
MODKIT141A	Trolley drive chain guard kit MGT, MGSL
MODKIT148	Bird nest protection modification kit
MODKIT150	Spacer kit for trolley apartment
UTIL001	Limit switch - thermoplastic roller lever
UTIL025	Limit switch - steel roller plunger

⁽¹⁾Designed for light and limited use in the event of troubleshooting only.



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Specifications and design modifications subject to change without prior notice. PL.CAD.2021.05.03.R0