The MSC Controller

The MSC Controller has been specifically developed for control of our electromechanical series of MPT and MPP pedestrian control products which utilise solenoid technology for locking and unlocking of the turnstile mechanism. It was our objective to enhance our well known electromechanical devices with a versatile control unit offering an alternative to our existing motor technology. The heart of this control unit is a microprocessor which controls the various semi-conductors and relay outputs. Additional functions such as a watchdog timer and cycle counter have also been incorporated within the design. The upper section of the housing contains the terminal strip for all wiring connections, an RS232 interface as well as the logic DIP switch and trimming potentiometer. This DIP switch and potentiometer allow for the adjustment or changing of the operating parameters whereas the RS232 interface allows high level control and/or updating of special programs if required.

Adjustments:

RS232 Interface

Updating of new software
Changing of available software
• High level control of either the MPP/MPT
• High level communication with windows based software

DIP switch

• Product selection - MPP or MPT
• Multiple input memory - ON / OFF
• Locking delay time - ON / OFF
• Solenoid operation left - NORMAL INVERTED
• Solenoid operation right - NORMAL INVERTED

Potentiometer

Hold open time

Operating modes

• Pulse input to release
• Pulse input to release with multiple input memory
• Permanent input to release – both directions
• Pulse input to release - one direction, permanent release in the opposite direction

For operating the control unit it is necessary to connect different inputs and outputs according to the connection diagram. Further available inputs/outputs can be used as per the requirements.

Semi-conductor outputs

• Solenoid left
• Solenoid right

Relay outputs

• Pulse counter left
• Pulse counter right
• Gate in use – left
• Gate in use – right
• Alarm – watchdog

Inputs

• Open left (LED)
• Open right (LED)
• Emergency open (LED)
• Inputs 4–7 used for internal connections (LED)
counter

passage left

passage right

Alarm

X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20 X21 X22 X23 X24 X25 X26 X27 X28

K1K K2K K3K K4K K5K

not occupied

24V / 400mA

17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

RS232

ON OFF

IN1 IN2 IN3 IN4 IN5 IN6 IN7

n.c.

IN1 = opening left
IN2 = opening right
IN3 = emergency release
IN4 = reserve
IN5 = limit switch left
IN6 = limit switch right
IN7 = reserve

19VAC

or 24VDC

24V

24V

Sol. left

Sol. right

DIP1 DIP2 DIP3 DIP4 DIP5 DIP6 DIP7 DIP8 function

X Imp. X X X X X X ON = pulse storage
X X X Stop ON OFF X X X X ON = locking delay function
X X X ON OFF X X X X Test = toggle all outputs
X X X ON OFF X X X X Test = software version
X X X ON ON X X X X Test = inputs -> outputs
X X X X X ON X X INvert output left
X X X X X X ON X X INvert output right