

# **INSTALLATION INSTRUCTIONS V8 BF 1030 DOOR OPERATOR with Soft Stop function**

<b>TECHNICAL SPECIFICATIONS</b>	
POWER	0.55 Kw
TORQUE	100 Nm
OUTPUT SPEED	30 RPM
NUMBER OF LIMIT TURNS	33.5
I.P. RATING	54
MAX. CURRENT	1.8 AMPS
POWER SUPPLY	400V / 50 Hz / 3 PHASE
VERSION	V8 05 2014
<b>Rotech Group Pty Ltd</b>	

## IMPORTANT!!!

THESE INSTRUCTIONS MUST BE READ **FULLY** AND UNDERSTOOD BEFORE INSTALLING THIS OPERATOR.

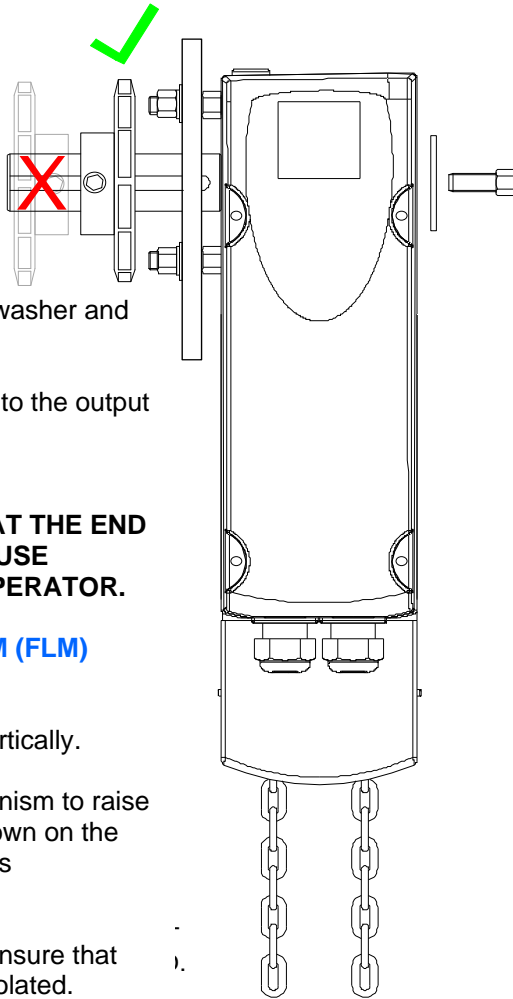
**THE PUSH BUTTON ENCLOSURE SHOULD BE MOUNTED WITH THE CABLE ENTRY AT THE BOTTOM.**

1. Remove the plastic plugs from the hollow output shaft.

2. Fit the mounting plate using the 4 x m8 studs, spring washers and nuts supplied.

3. Fit the key into the shaft and install the shaft into the operator and secure with the m8 x 20 bolt, spring washer and flat washer.

4. Fit the key and drive sprocket to the output shaft, align and tighten.



**WARNING**  
FITTING THE DRIVE SPROCKET AT THE END OF THE OUTPUT SHAFT MAY CAUSE EXCESSIVE LOADING ON THE OPERATOR.

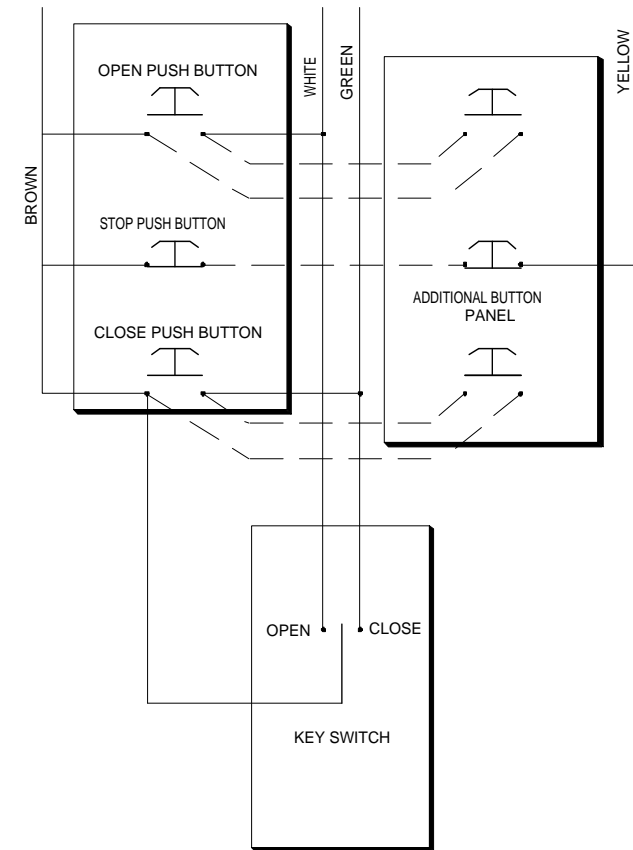
### FLOOR LEVEL MECHANISM (FLM) (IF FITTED)

1. The unit must be mounted vertically.
2. Engage the floor level mechanism to raise or lower the door by pulling down on the hand chain. (interlock activates automatically).
3. When using the hand chain ensure that power to the door control is isolated.

## WARNING

**DO NOT USE THE HAND CHAIN TO TENSION THE SPRINGS IN THE DOOR. SERIOUS DAMAGE TO THE HAUL CHAIN MECHANISM MAY OCCUR.**

## ADDITIONAL CONNECTIONS



### INTEGRAL SAFETY CIRCUIT

THE SAFETY CIRCUIT COMBINES THE THERMAL TRIP AND, FOR OPERATORS WITH MANUAL OVERRIDE, THE INTERLOCK SWITCH.

### THERMAL TRIP

THE THERMAL TRIP IS A HEAT SENSITIVE SWITCH EMBEDDED INTO THE MOTOR WINDINGS, WHICH WILL OPERATE SHOULD THE MOTOR BE OVERLOADED.

NOTE : THIS SWITCH IS NOT A SUBSTITUTE FOR A SUITABLY RATED CIRCUIT BREAKER.

### MANUAL OVERRIDE INTERLOCK SWITCH

THE MANUAL OVERRIDE INTERLOCK ISOLATES THE CONTROL CIRCUIT TO PREVENT ELECTRICAL OPERATION WHEN THE DOOR IS BEING USED MANUALLY.

### C. Soft Stop (cont)

To set this function switch 3 must be ON, close the door fully on the down limit. Press and hold the down button for 10 seconds and release (this will reset the operator).

Press and hold the up button till the door is fully open and release.

Press and hold the down button till the door is fully closed and release.

Repeat this procedure for 2 complete cycles (open, close, open, close).

If any of the buttons are released before the door reaches the limit then the above procedure will have to be repeated.

When this is completed the door will revert to impulse mode if D.I.L switches 1+2 are ON

D. **GO FUNCTION:** when set to on it activates the open button as a go function. (opens a door, closes a fully open door, reverses a closing door.) use this function where a single button radio operation is required.

E. **AFTER RUN / SAFETY EDGE MONITORING:** activates the after run function which uses the close limit (set 50mm from the floor) as a safety edge over ride limit. When the close limit is activated the operator electrically over runs this limit. (max 0.3 sec) until a signal from the safety edge is received. If no safety edge signal is received the fail led will flash and the door will fall to dead man mode. To reset simply close the door fully until a safety signal is received.

F. **ELECTRIC EDGE 8K2:** activates input for electric edge and disables the pneumatic safety edge input.

### G. Auto Close

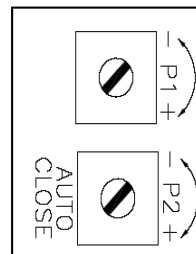
The auto close function is set by turning the Potentiometer P2 clockwise. The auto close time is adjustable from 2 –125 seconds.

**IMPORTANT**

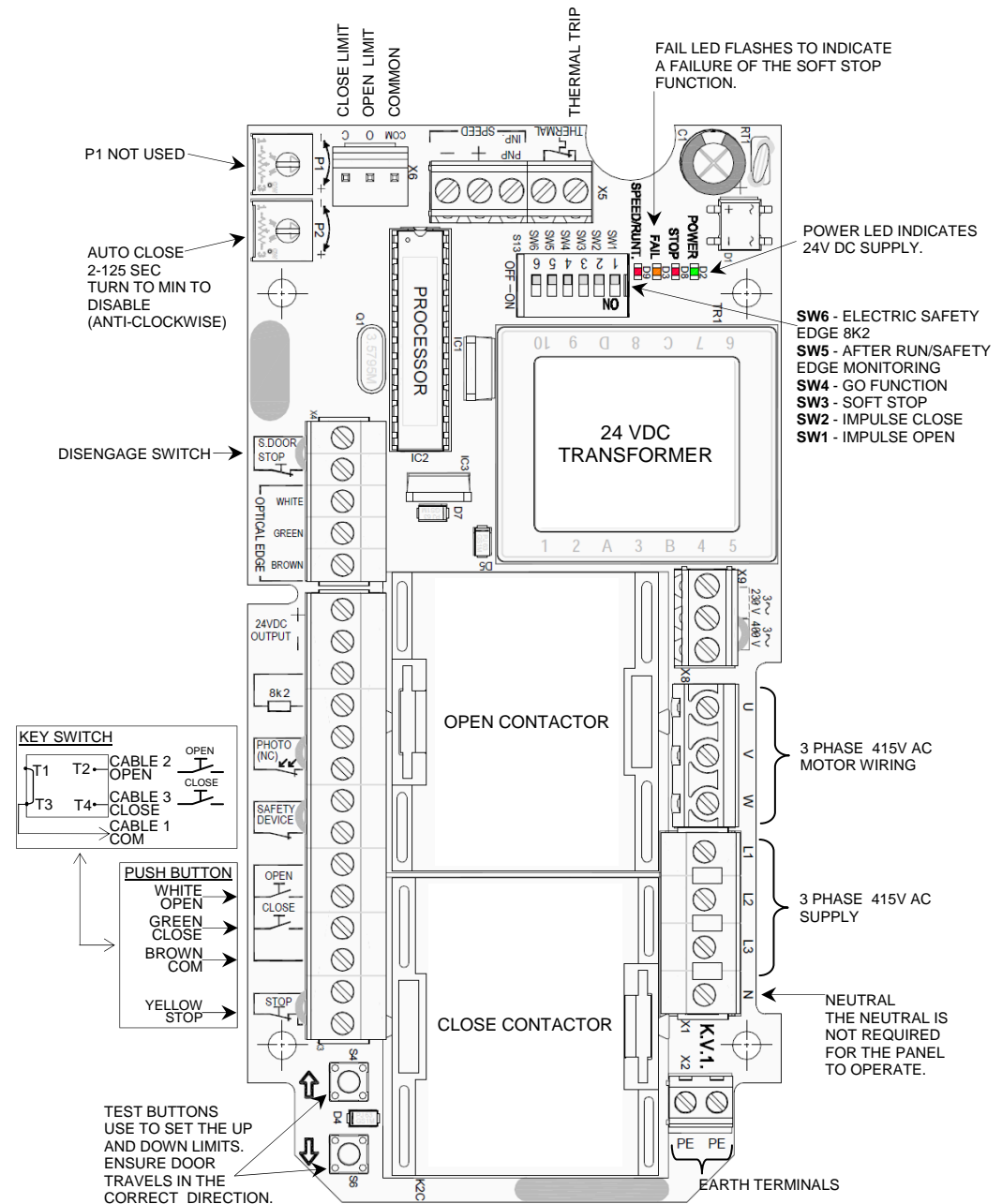
Make sure the P2 potentiometer is turned fully anti clockwise if this feature is **NOT** required or the door will close automatically without any input signal.

If the door is fully open and the stop circuit is activated for more than 5 seconds the auto close function is Disabled, to reset give another close command.

This feature must not be used without setting the Soft Stop feature or installing another safety device, eg, PE beams, safety edge or safety loops



# KV1 CONTROL BOARD (V3)



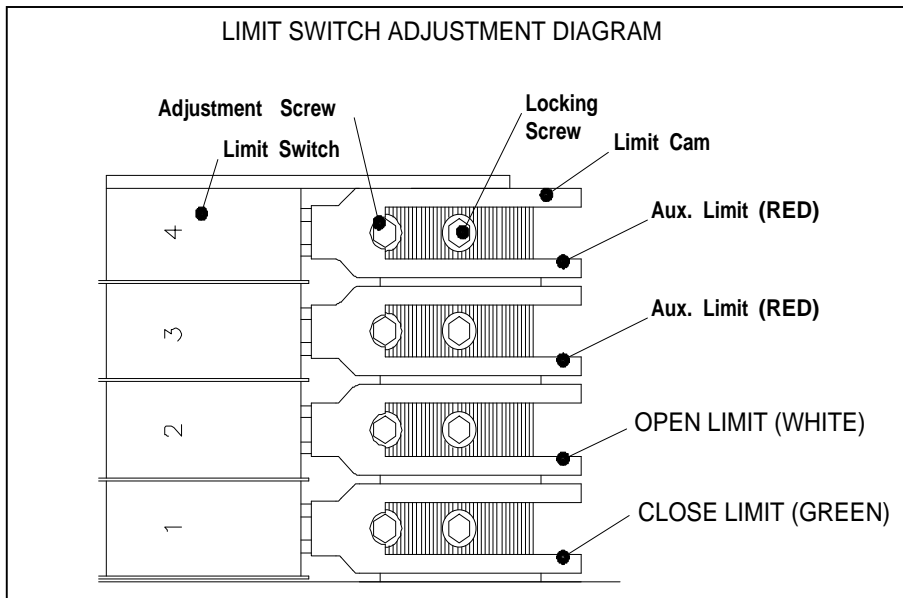
**WARNING!** ENSURE POWER TO THE OPERATOR IS **OFF** BEFORE REMOVING TERMINAL BOX COVER.

**STANDARD INSTALLATION INSTRUCTIONS**

1. Check that the power supply is suitable. 400V /AC 3PH / 50 Hz. Protected by a 3 pole C type MCB rated at 2 Amps or preferable a manual motor starter rated at 1.6 / 2.5 Amps and terminated in a Red 3 Ph Socket.
2. Mount the operator on the door shaft and secure to the torque plate.
3. Set the limit switches.

**HOW TO SET THE LIMIT SWITCHES.**

- (a) Remove the terminal / limit switch cover from the operator. ( The limit switches are supplied unset.)
- (b) The limit switches can be easily identified 'WHITE' - open limit. 'GREEN' - close limit. 'RED' - auxiliary limit.
- (c) Manually wind the door in the closed direction, noting the direction of the Green Cam until the desired closed position is reached.
- (d) Loosen the locking screw on the limit cam and rotate the cam in the required direction, and secure in position with the locking screw. For fine adjustment use the adjustment screw.
- (e) Repeat these steps for the open direction of travel. (White Cam)



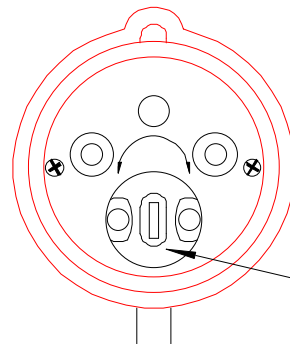
**AUXILIARY LIMIT SWITCHES**

Connections for these limit switches must be made directly onto the required switch and terminated using an appropriate red insulated spade crimp to suit 0.5 – 1.5 mm cable. These switches may be wired N/O or N/C and must be locked in position even when not used..

4. Manually operate the door to the mid position.
5. Make sure the pot P2 is turned fully **ANTI CLOCKWISE (see note G)** Apply power press the open TEST button on the control board NOT the open/close/stop station, if the door travels in the wrong direction, see 3 ph red industrial socket instructions below.

**3 PH RED INDUSTRIAL SOCKET (IF FITTED)**

TO CHANGE THE ROTATION DIRECTION.



1. Remove the plug from the socket.
2. Place a large flat screwdriver into the slot provided.
3. Press down and rotate the pin through 180.
4. Plug the operator back into the socket.

INSERT SCREWDRIVER BLADE HERE.

6. Mount and connect the safety edge or P.E. beam.
7. Set the D.I.L. switches

**SW6** - ELECTRIC SAFETY EDGE 8K2

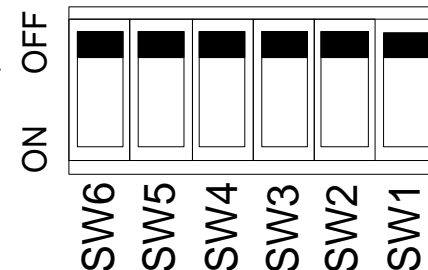
**SW5** - AFTER RUN / SAFETY EDGE MONITORING

**SW4** - GO FUNCTION

**SW3** - SOFT STOP

**SW2** - IMPULSE CLOSE

**SW1** - IMPULSE OPEN



**NOTE:** MOVE REQUIRED D.I.L. SWITCHES DOWNWARD TO SET TO THE ENABLE POSITION.

- A. IMPULSE OPEN:** when enabled it activates impulse open operation (press and release)
- B. IMPULSE CLOSE:** when enabled it activates impulse close operation (press and release)
- C. SOFT STOP:** activates the soft stop function, reverses a closing door and stops an opening door if an obstruction is detected. After initial tuning the soft stop system is constantly monitoring and tuning as required. (spring wear)