

DIN PROFILE LOCKPLUG
 SEE LOCK STYLE SELECTION OPTIONS.
 *FOR HIGH SECURITY DIN LOCK ONLY - KEY CAN
 ONLY BE INSERTED/REMOVED IN LOCKED POSITION.
 FOR OTHER LOCK OPTIONS, KEY CAN BE
 INSERTED/REMOVED IN LOCKED OR UNLOCKED
 POSITION.

PROXIMITY CARD (ORDER SEPARATELY)

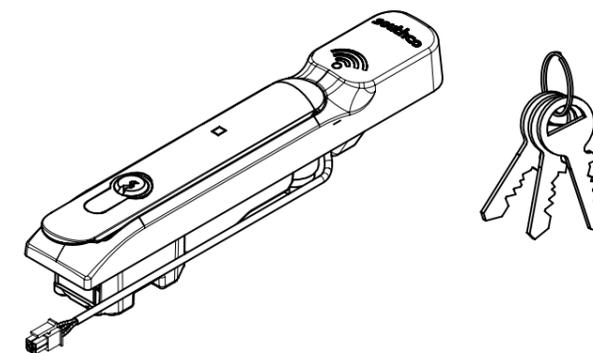
PART NUMBER SELECTION
 EA-C2-021-9 PROXIMITY CARD
 EA-C2-021 PROXIMITY CARD (NO LOGO)



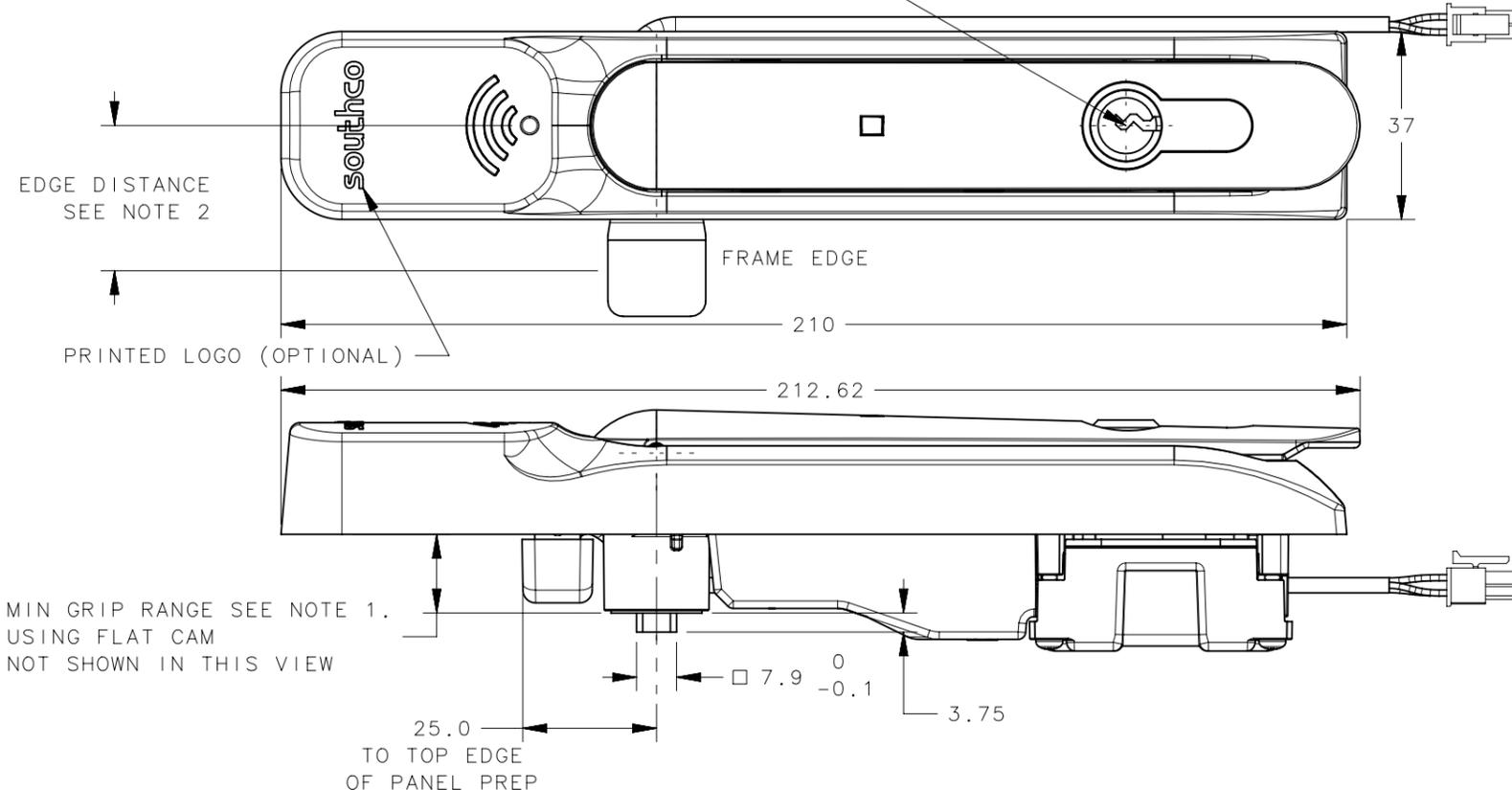
SCALE 1:3

SEE J-EA-C2-021
 FOR MORE PROX CARD
 INFORMATION

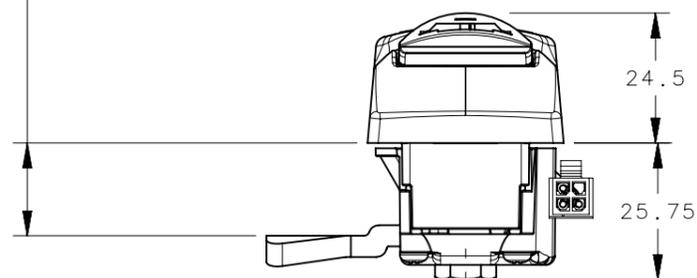
| REVISION HISTORY | | | |
|------------------|-----------|--------|-----------------|
| REV | DATE | BY | DESCRIPTION |
| J | 13NOV2017 | CB1/VK | PRN: P2017-3021 |



KEYS INCLUDED (WHERE APPLICABLE)



GRIP RANGE
 17.5 (EXAMPLE USING OFFSET CAM P/N E5-6711)



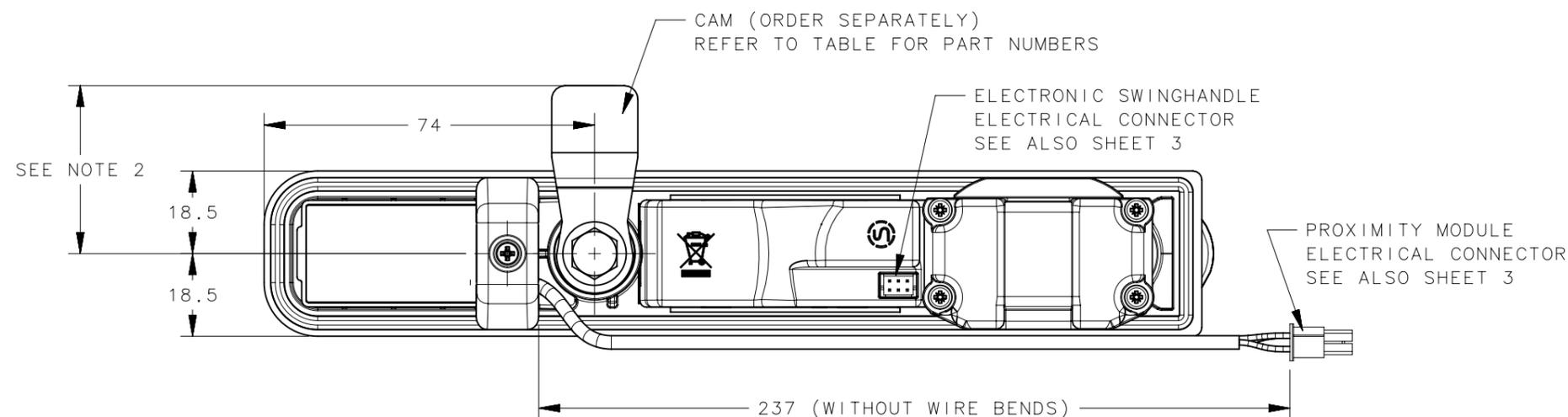
NOTES:

- MIN GRIP RANGE WITH FLAT CAM 15.5mm
 EXAMPLE SHOWN: 2mm OFFSET CAM - GRIP RANGE 17.5mm
- FOR CAM LENGTH 38mm
 -EDGE DISTANCE 30mm.
 FOR CAM LENGTH 45mm.
 -EDGE DISTANCE 37mm
- SELECT CAM PART NUMBERS ACCORDING TO TABLE
 TO PROVIDE GRIP REQUIRED.

| CAM PART NUMBER (ORDER SEPARATELY) | | |
|------------------------------------|-------------------------|-------------------------|
| GRIP | CAM LENGTH (1) 38 MM | CAM LENGTH (2) 45 MM |
| 15.5 | E5-6710 | - |
| 17.5 | E5-6711 | - |
| 19.5 | E5-6712 | E5-6112 |
| 21.5 | E5-6713 | E5-6113 |
| 23.5 | E5-6714 | E5-6114 |

OTHER ADDITIONAL OFFSETS:
 (1) SEE SOUTHCO DRAWINGS J-E5-67-A & J-E5-67-B
 (2) SEE SOUTHCO DRAWINGS J-E5-61-A

- THE H3-EM-69-000 IS SHIPPED WITHOUT A LOCKPLUG. THIS PRODUCT MUST BE PAIRED WITH A SOUTHCO APPROVED LOCK TO FUNCTION PROPERLY. USE WITH AN UNAPPROVED LOCK PLUG VOIDS THE PRODUCT WARRANTY.
- READS THE FOLLOWING CARDS: HID® 125kHz PROX WITH RS-232 DATA OUTPUT



ELECTRONIC SWINGHANDLE PART NUMBER SELECTION
H3-EM-69-LLL-XX

LLL LOCK STYLE
 000 NO LOCK OR KEYS
 001 BLANK LOCKPLUG: BRIGHT CHROME

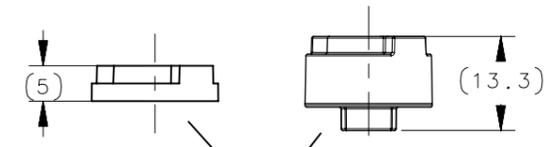
XX LOGO STYLE
 NONE NO LOGO
 10 SOUTHCO LOGO

100 HIGH SECURITY DIN LOCK (3 KEYS)
 200 KEY CODE CH-751 (2 KEYS INCLUDED)
 3LL KEY CODE RS001 (2 KEYS INCLUDED)
 LL = 00 FOR KEY CODE RS001
 CONTACT SOUTHCO FOR OTHER AVAILABLE KEY CODES)

| | | | | |
|--|----------------------|---|------------|----------------|
| THIRD ANGLE PROJECTION | | | | |
| | | | | |
| TOLERANCES UNLESS OTHERWISE NOTED | | DESCRIPTION | | |
| ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY. | | H3-EM ELECTRONIC SWINGHANDLE WITH PROX READER WITH RS-232 DATA OUTPUT | | |
| PROPRIETARY ITEM | PER ASME Y14.5M-1994 | SIZE | SYSTEM | DWG NO. |
| EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC. | | A3 | NX | J-H3-EM-69-100 |
| | | DRAWN BY | DATE | SCALE |
| | | GGG/ADT | 11JULY2012 | NTS |
| | | | | SHEET 1 OF 4 |

| REVISION HISTORY | | | |
|------------------|-----------|--------|-----------------|
| REV | DATE | BY | DESCRIPTION |
| J | 13NOV2017 | CB1/VK | PRN: P2017-3021 |

1. USE ONLY MOUNTING HARDWARE SUPPLIED.
2. MAXIMUM TIGHTENING TORQUE FOR MOUNTING SCREWS 0.5 Nm.
3. PAWL SCREW INSTALLATION TORQUE 4 Nm MIN.
4. USE #1 POZIDRIV DRIVER WHEN INSTALLING MOUNTING SCREWS.



ROTATION LIMITER: (LEFT HAND MOUNTING SHOWN)
 SELECT THIN ROTATION LIMITER FOR STANDARD APPLICATIONS
 USE THICK ROTATION LIMITER FOR ADDITIONAL CLEARANCE AS
 REQUIRED ON MULTI POINT SYSTEMS
 ORIENTATION ACCORDING TO REQUIRED HANDLE OPERATION
 (LEFT OR RIGHT HANDED MOUNTING)

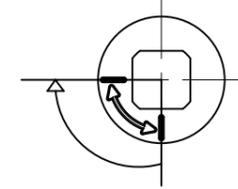
PAWL (ORDERED SEPARATELY):
 ORIENTATION ACCORDING TO
 REQUIRED HANDLE OPERATION
 (LEFT OR RIGHT HANDED MOUNTING)
 (LEFT HAND MOUNTING SHOWN)

TOP MOUNTING BRACKET

PAWL SCREW

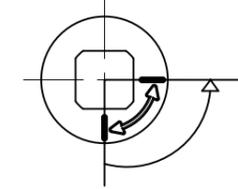
POZIDRIV MOUNTING SCREW 14 LONG
 (SEE NOTE 4)

OPTION 1 FOR INSTALLATION
 OF ROTATION LIMITER
 - VIEWED FROM BACK-



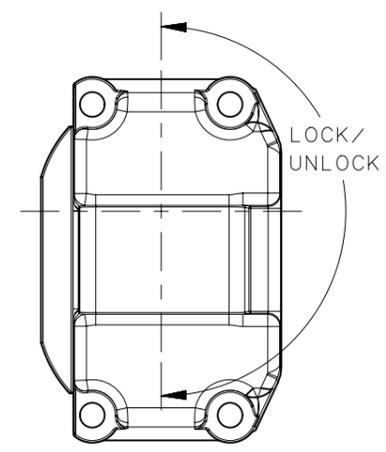
LEFT HAND MOUNTING
 TO OPEN: TURN HANDLE 90°
 COUNTER CLOCKWISE IF VIEWED
 FROM FRONT

OPTION 2 FOR INSTALLATION
 OF ROTATION LIMITER
 - VIEWED FROM BACK-

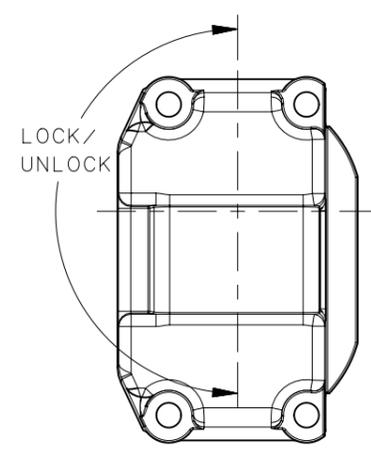


RIGHT HAND MOUNTING
 TO OPEN: TURN HANDLE 90°
 CLOCKWISE IF VIEWED
 FROM FRONT

INSTALLATION OF BOTTOM MOUNTING BRACKET

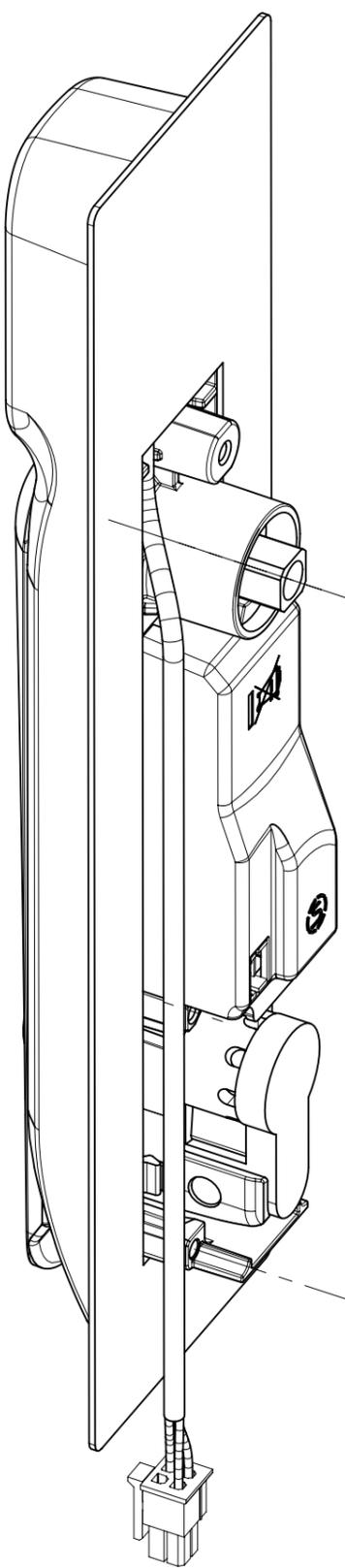


LEFT HAND MOUNT
 WHEN H3-61-55-33
 MULTI POINT SYSTEM
 IS USED.



RIGHT HAND MOUNT
 WHEN H3-61-56-33
 MULTI POINT SYSTEM
 IS USED.

OPERATION OF LOCK PLUG CORRESPONDS WITH
 ORIENTATION OF BOTTOM MOUNTING BRACKET



BOTTOM MOUNTING BRACKET:
 ORIENTATION ACCORDING TO
 REQUIRED LOCK PLUG OPERATION
 (LEFT OR RIGHT HANDED MOUNTING)

POZIDRIV 4 x MOUNTING SCREW 25 LONG
 (SEE NOTE 4)

| | | | | | | |
|--|--|---------------------|--------------------|---|-----------------|--|
| THIRD ANGLE PROJECTION | | | | southco [®] CONNECT • CREATE • INNOVATE | | |
| | | | | | | |
| TOLERANCES UNLESS OTHERWISE NOTED | | | | DESCRIPTION | | |
| ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY. | | | | H3-EM ELECTRONIC SWINGHANDLE WITH PROX READER WITH RS-232 DATA OUTPUT | | |
| PROPRIETARY ITEM EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC. | | SIZE A3 | SYSTEM NX | DWG NO. J-H3-EM-69-100 | | |
| PER ASME Y14.5M-1994 | | DRAWN BY GGG/ADT | DATE 11JULY2012 | SCALE 1:1 | SHEET 2 OF 4 | |

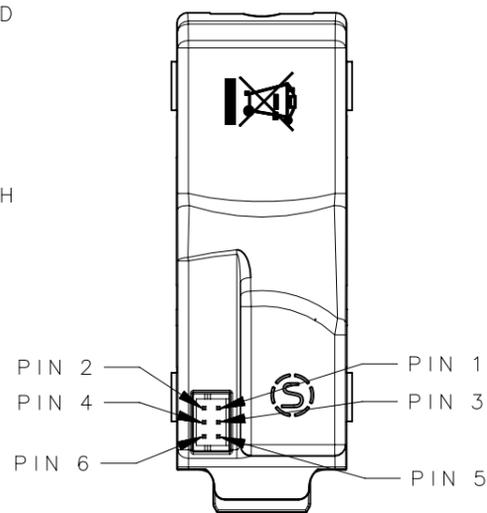
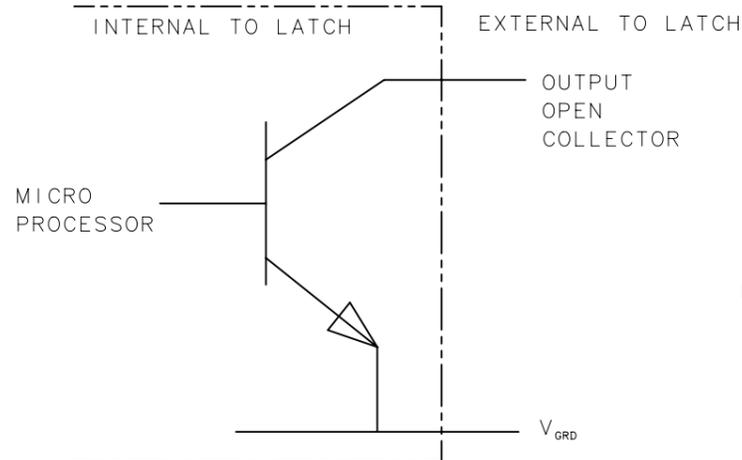
ACTUATOR MODULE

ELECTRICAL SPECIFICATION:

- A. POWER: 12V TO 24V
 - OPERATING CURRENT: LESS THAN 200mA AT 12VDC WITH NO EXTERNAL MECHANICAL LOAD APPLIED TO HANDLE.
 - MAX CURRENT WITH STALLED ACTUATOR: 1A MAX AT 12VDC (STALL LIMITED TO 2 SECONDS)
 - STANDBY CURRENT: 25mA TYPICAL.
- B. CONTROL INPUT:
 - TO UNLOCK: SUPPLY 9VDC MINIMUM (DO NOT EXCEED SUPPLY VOLTAGE) FOR A MINIMUM OF 100 MILLISECONDS. THE LATCH WILL REMAIN UNLOCKED FOR AS LONG AS THE SIGNAL IS PRESENT OR A MINIMUM OF 3 SECONDS.
- C. OUTPUT:
 - OPEN COLLECTOR OUTPUT. RATING 9 TO 24VDC. 100mA MAX LOAD
 - CAUTION! TO PREVENT DAMAGE TO THE PRODUCT DO NOT EXCEED MAXIMUM LOADS STATED AND FOLLOW WIRING DIRECTIVES.
 - FOR OUTPUT SIGNAL DETAILS AND LED SEQUENCE SEE TRUTH TABLE.
- D. CONNECTIONS:
 - SIX POSITION CONNECTOR
 - HIROSE ELECTRIC CO LTD. PART NUMBER DF11-6DP-2DSA.
 - SEE PIN-OUT TABLE.

| PIN | DESCRIPTION | NOTE |
|-----|------------------------|---|
| 1 | VGND | GROUND (MUST BE SAME AS PROX READER MODULE) |
| 2 | VSUPPLY | 12 TO 24 VDC POWER SUPPLY INPUT (MAY BE CONNECTED TO PROX READER VCC INPUT) |
| 3 | n/c | NO CONNECT |
| 4 | CONTROL SIGNAL | COMMAND INPUT (9VDC UP TO SUPPLY VOLTAGE, 100 MILLISECONDS MINIMUM) |
| 5 | ELECTRONIC LOCK STATUS | OPEN COLLECTOR OUTPUT (RATED FOR VSUPPLY, 100mA MAX. LOAD) |
| 6 | MECHANICAL LOCK STATUS | OPEN COLLECTOR OUTPUT (RATED FOR VSUPPLY 100mA MAX. LOAD) |

- E. WIRE HARNESS (NOT INCLUDED)
 - SOUTHCO P/N: EA-W01-100 *, SEE ALSO J-EA-W01 FROM ACTUATOR MODULE TO STRIPPED AND TINNED END LENGTH 1000MM
 - *CONTACT SOUTHCO FOR OTHER LENGTHS



ACTUATOR PIN-OUT DIAGRAM (SEE NOTE D)

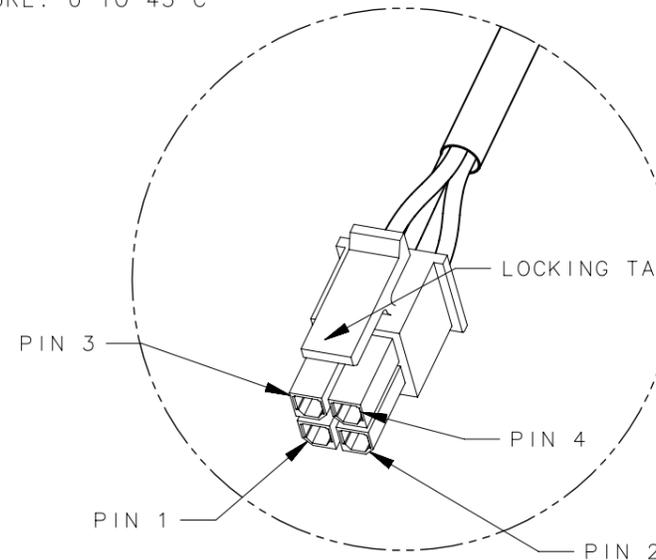
PROXIMITY READER MODULE

ELECTRICAL SPECIFICATION:

- F. - SUPPLY VOLTAGE (VCC): 12VDC TO 24VDC
- OPERATING CURRENT: 50mA MAXIMUM (NO EXTERNAL DEVICES ATTACHED)
- TRANSMIT FREQUENCY: 125kHz FSK
- TX DATA SIGNAL VOLTAGE: +12/-12 VDC
- RS-232 COM PORT SETTINGS:
 - BITS PER SECOND: 9600
 - DATA BITS: 8
 - PARITY: NONE
 - STOP BITS: 1
 - FLOW CONTROL: NONE
- G. PROX READER CONNECTIONS:
 - 4 POSITION CONNECTOR
 - MOLEX, 3.0mm PITCH MICRO-FIT 3.0 RECEPTACLE HOUSING, DUAL ROW 4 CIRCUITS. MOLEX P/N: 43025-0400
 - MICROFIT 3.0 CRIMP TERMINAL, FEMALE. MOLEX P/N: 43030-0004
 - SEE PIN-OUT TABLE.

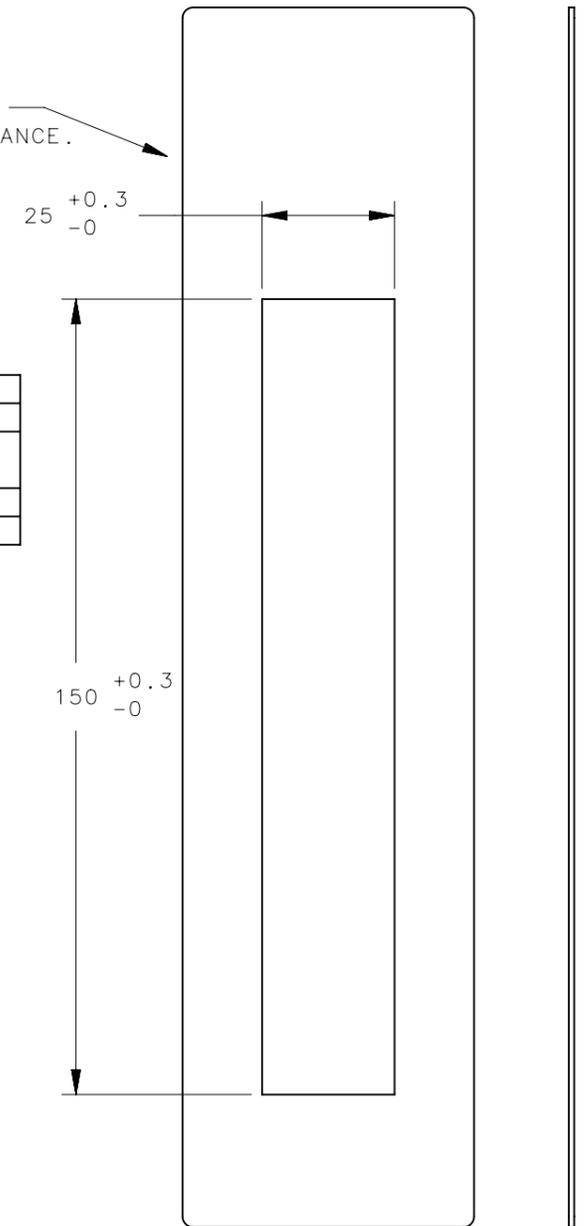
| PIN | WIRE COLOR | DESCRIPTION | NOTE |
|-----|------------|-------------|--|
| 1 | BLACK | GND | GROUND (MUST BE SAME AS ACTUATOR PORTION) |
| 2 | RED | VCC | 12 TO 24VDC POWER SUPPLY INPUT (MAY BE CONNECTED TO ACTUATOR MODULE V _{SUPPLY} INPUT) |
| 3 | GREEN | TX | TRANSMIT DATA OUTPUT |
| 4 | n/c | n/c | NO CONNECT |

- H. WIRE HARNESS (NOT INCLUDED)
 - SOUTHCO P/N: EA-W23-502 *, SEE ALSO J-EA-W23-X02 FROM PROXIMITY MODULE TO STRIPPED AND TINNED LENGTH 5000MM.
 - *CONTACT SOUTHCO FOR OTHER LENGTHS AND MODELS
- I. SEE J3-EM-69-100-M ELECTRONIC SWINGHANDLE OPERATING INSTRUCTIONS FOR MORE INFORMATION.
- J. OPERATING TEMPERATURE: 0 TO 45°C



PROX READER PIN-OUT DIAGRAM (SEE NOTE G) SCALE 2:1

SEE SHEET 1, NOTE 2 FOR FRAME EDGE DISTANCE.



PANEL THICKNESS 1 TO 2.5
PANEL PREPARATION

| REVISION HISTORY | | | |
|------------------|-----------|--------|-----------------|
| REV | DATE | BY | DESCRIPTION |
| J | 13NOV2017 | CB1/VK | PRN: P2017-3021 |

| | | | |
|--|----------------------|---|------------------------|
| THIRD ANGLE PROJECTION | | | |
| MILLIMETERS [IN] | | | |
| TOLERANCES UNLESS OTHERWISE NOTED | | DESCRIPTION | |
| ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY. | | H3-EM ELECTRONIC SWINGHANDLE WITH PROX READER WITH RS-232 DATA OUTPUT | |
| PROPRIETARY ITEM | PER ASME Y14.5M-1994 | SIZE A3 | SYSTEM NX |
| EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC. | | DWG NO. J-H3-EM-69-100 | DATE 11JULY2012 |
| | | DRAWN BY GGG/ADT | SCALE 1:1 SHEET 3 OF 4 |

| REVISION HISTORY | | | |
|------------------|-----------|--------|-----------------|
| REV | DATE | BY | DESCRIPTION |
| J | 13NOV2017 | CB1/VK | PRN: P2017-3021 |

LATCH STATUS DEFINITION

| LATCH STATUS | LATCH LED | PIN 6 OUTPUT HANDLE LOCK | PIN 5 OUTPUT ELECTRONIC LOCK | PIN 4 CONTROL INPUT | NOTE |
|-------------------------|-------------------------|-----------------------------|---------------------------------|------------------------------|--|
| SECURED | BLUE | OPEN COLLECTOR | OPEN COLLECTOR | GND | ENCLOSURE SECURED- ACCESS DENIED |
| ELECTRONICALLY RELEASED | BLUE / MAGENTA FLASHING | OPEN COLLECTOR | LOW | V _{ss} ⁺ | ENCLOSURE READY FOR ACCESS |
| MECHANICALLY RELEASED | BLUE FLASHING LOW | LOW | LOW | V _{ss} ⁺ | ACCESS GAINED - HANDLE LIFTED OR MECHANICALLY UNLOCKED |
| | | LOW | OPEN COLLECTOR | GND | ACCESS GAINED - HANDLE LIFTED - ELECTRONIC LOCK CLOSED |
| HANDLE NOT FULLY CLOSED | BLUE / RED FLASHING | OPEN COLLECTOR | LOW | GND | INTERIM STATES ONLY DURING CLOSING OF HANDLE |
| | | LOW | LOW | GND | |

ELECTRONIC SWINGHANDLE MATERIALS

| COMPONENT | MATERIAL | FINISH | NOTE |
|---------------------------|-------------------------|---------------------------------------|---------------------------------|
| H3-EM-69-XXX | | | |
| CIRCUIT BOARD | DETAILS ON REQUEST | DETAILS ON REQUEST | |
| MOTOR | DETAILS ON REQUEST | DETAILS ON REQUEST | |
| GEAR SHAFT | STAINLESS STEEL | NATURAL | |
| WORM GEAR | PA66 1300S | NATURAL | |
| PINION GEAR | POM M90-44 | BLACK | |
| SPUR GEAR | POM M90-44 | BLACK | |
| GEAR RETAINER | PC (LEXAN V0) | CLEAR | |
| MOTOR COVER | PC ABS (UL94- V0) | BLACK | |
| LATCH BODY | 30% GF NYLON (UL94- V0) | BLACK (A&B SURFACES VD136) | |
| HANDLE MOULDING | 30% GF NYLON (UL94- V0) | BLACK (A&B SURFACES VD136) | |
| LIGHT PIPE | PC (LEXAN V0) | CLEAR | |
| BOTTOM MOUNTING BRACKET | 30% GF NYLON (UL94- V0) | BLACK | |
| SLIDE | 30% GF NYLON (UL94- V0) | WHITE | |
| HANDLE SHAFT | DIE CAST ZINC | ZINC PLATE BRIGHT CHROMATE | |
| ROTATION LIMITER | DIE CAST ZINC | ZINC PLATE BRIGHT CHROMATE | 2 SIZE OPTIONS SUPPLIED |
| TOP MOUNTING BRACKET | 30% GF NYLON (UL94- V0) | BLACK | |
| MOUNTING SCREW 25 LONG | STEEL | ZINC PLATE + BRIGHT CHROMATE | INSTALL WITH #1 POZIDRIV DRIVER |
| MOUNTING SCREW 14 LONG | STEEL | ZINC PLATE + BRIGHT CHROMATE | INSTALL WITH #1 POZIDRIV DRIVER |
| OUTPUT GEAR MOULDING | POM M90-44 | BLACK | |
| REFLECTOR | POM M90-44 | OPAQUE WHITE | |
| CONNECTING LEAD | DETAILS ON REQUEST | DETAILS ON REQUEST | ORDER SEPERATELY |
| DIN LOCKPLUG | DETAILS ON REQUEST | DETAILS ON REQUEST | OPTIONAL WITHOUT LOCKPLUG |
| LOCK PLUG RETAINING SCREW | STEEL | ZINC PLATE + BRIGHT CHROMATE + SEALER | |
| SHAFT PIN | SAE 30302/30304 | PLAIN, OILED | |
| O-RING | BLACK NBR RUBBER | GREASED | |
| PAWL SCREW | STEEL | ZINC PLATE + BRIGHT CHROMATE | |
| PAWL | STEEL | ZINC PLATE + BRIGHT CHROMATE | ORDER SEPERATELY |
| PROXIMITY READER MODULE | DETAILS ON REQUEST | DETAILS ON REQUEST | |
| BLANK PLUG | DIE CAST ZINC | CHROME PLATE | OPTIONAL |
| SLIDE SPRING | 302 STAINLESS STEEL | NATURAL | |

| | | | | |
|---|--|---------------------------|---------------------|----------------------------------|
|  THIRD ANGLE PROJECTION |  CONNECT • CREATE • INNOVATE | | | |
| | MILLIMETERS [IN] | | | |
| | TOLERANCES UNLESS OTHERWISE NOTED | | | |
| | ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY. | | | |
| PROPRIETARY ITEM <small>EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.</small> | DESCRIPTION H3-EM ELECTRONIC SWINGHANDLE WITH PROX WITH RS-232 DATA OUTPUT | SIZE A3 | SYSTEM NX | DWG NO. J-H3-EM-69-100 |
| PER ASME Y14.5M-1994 | DRAWN BY GGG/ADT | DATE 11JULY2012 | SCALE 1:1 | SHEET 4 OF 4 |