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REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
G	18JUN2018	DJK/KAM	PRN: P2018-1469

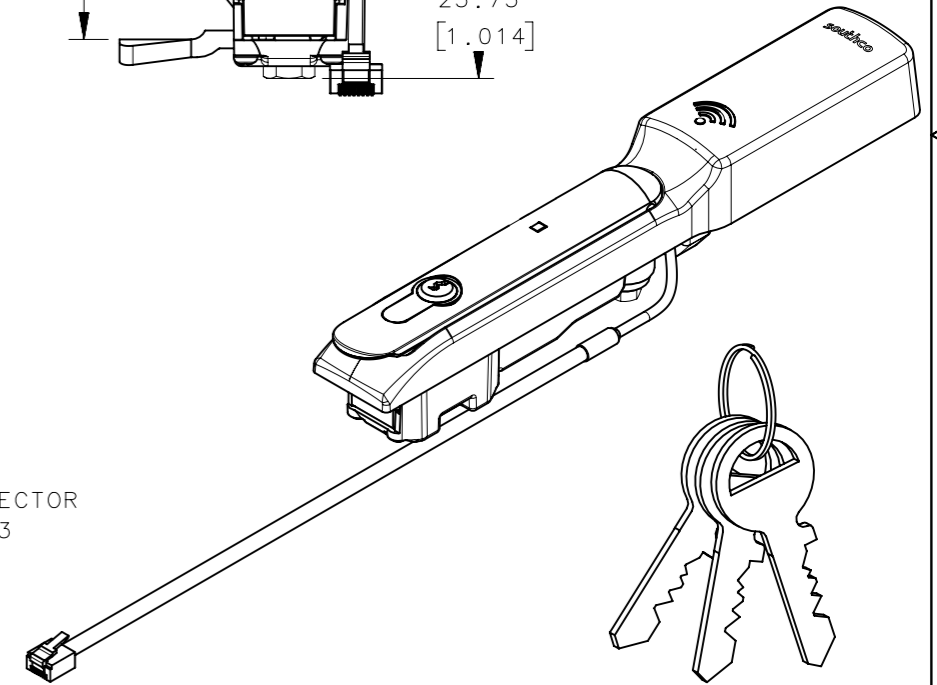
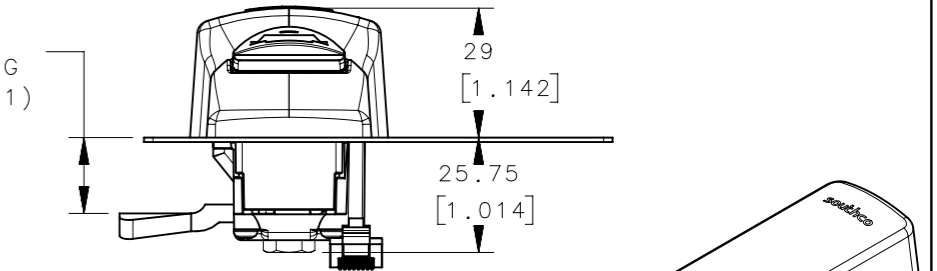
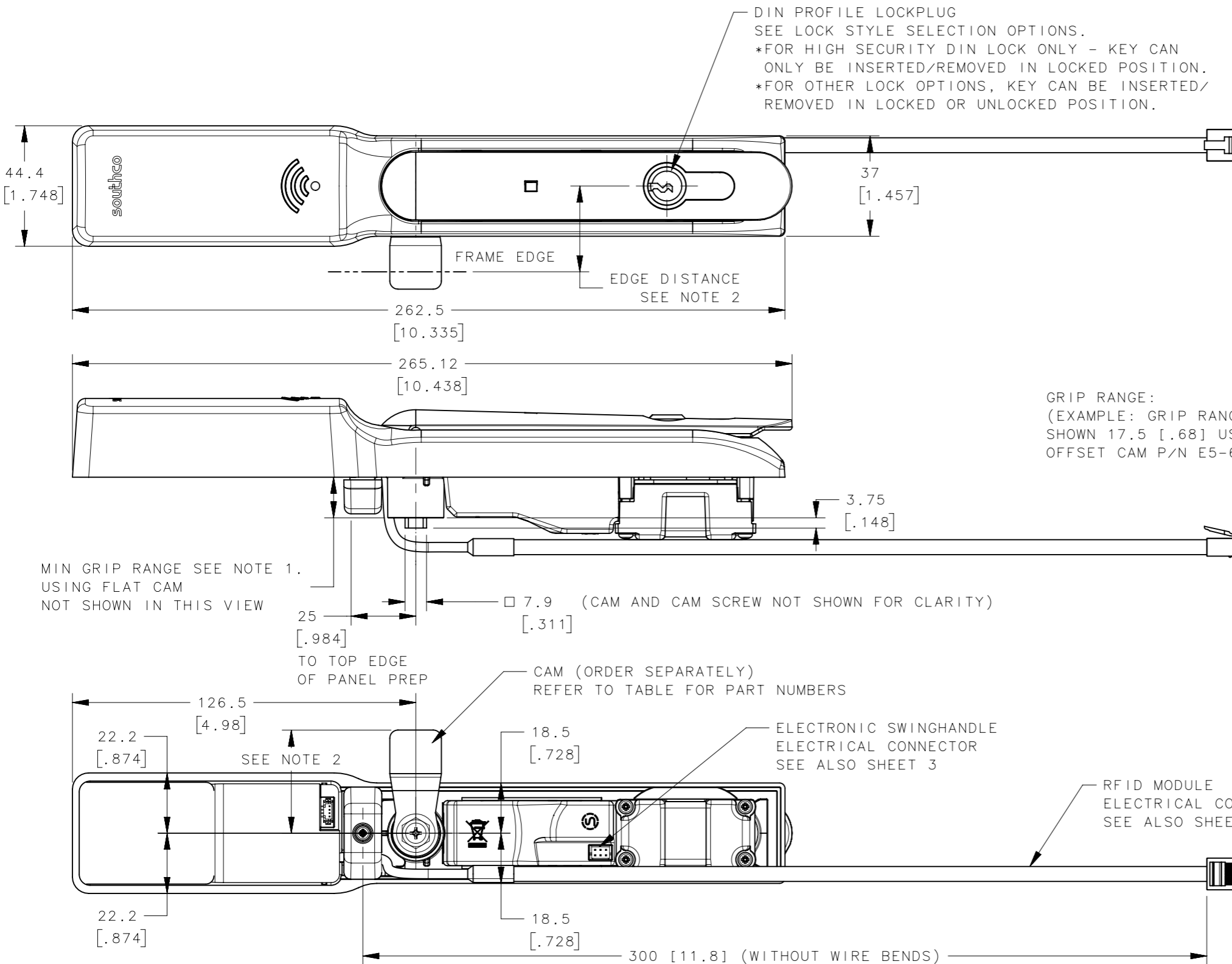
NOTES:

- MIN GRIP RANGE WITH FLAT CAM 15.5mm [.61]
 EXAMPLE SHOWN: 2mm OFFSET CAM - GRIP RANGE 17.5mm [.68]
- FOR CAM LENGTH 38mm [1.5] -EDGE DISTANCE 30mm [1.18]
 FOR CAM LENGTH 45mm [1.77] -EDGE DISTANCE 37mm [1.46]
- SELECT CAM PART NUMBERS ACCORDING TO TABLE TO PROVIDE GRIP REQUIRED.

CAM PART NUMBER (ORDER SEPERATELY)		
GRIP	CAM LENGTH (1) 38 MM [1.5]	CAM LENGTH (2) 45 MM [1.77]
15.5 [.61]	E5-6710	-
17.5 [.68]	E5-6711	-
19.5 [.76]	E5-6712	E5-6112
21.5 [.85]	E5-6713	E5-6113
23.5 [.93]	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-64-000 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.



KEYS INCLUDED
 (EXCEPT FOR NO LOCK PLUG AND BLANK LOCK PLUG VERSIONS)

ELECTRONIC SWINGHANDLE PART NUMBER SELECTION
H3-EM-64-LLL-XX-P

SEE OPERATIONAL INSTRUCTIONS FOR DEFAULT COMPATIBLE CARDS

- LLL LOCK STYLE
- 000 NO LOCK OR KEYS
- 001 BLANK LOCKPLUG: BRIGHT CHROME
- 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)
- 1 = BULK PACKAGE
- XX LOGO STYLE
- NONE NO LOGO
- 10 SOUTHCO LOGO

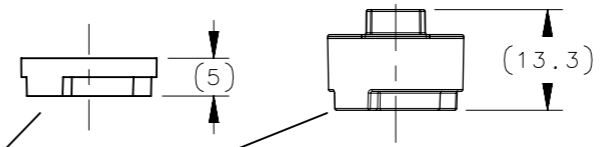
THIRD ANGLE PROJECTION	MILLIMETERS [IN]		
	TOLERANCES UNLESS OTHERWISE NOTED		
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		DESCRIPTION	H3-EM ELECTRONIC SWINGHANDLE HIGH FREQUENCY
PROPRIETARY ITEM	SIZE A3	SYSTEM NX	DWG NO. J-H3-EM-64-1
EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.	PER ASME Y14.5M-1994	DRAWN BY DJK	DATE 08OCT2014 SCALE NTS SHEET 1 OF 4

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CAUTION: SECURE WIRES SUCH THAT THEY DO NOT INTERFERE WITH LATCH CAM AND LOCK PLUG

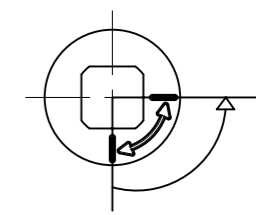
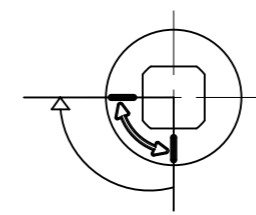
CHECK THAT THE WIRES ARE NOT PINCHED BETWEEN THE LATCH HOUSING, PANEL AND TOP MOUNTING BRACKET

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)



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

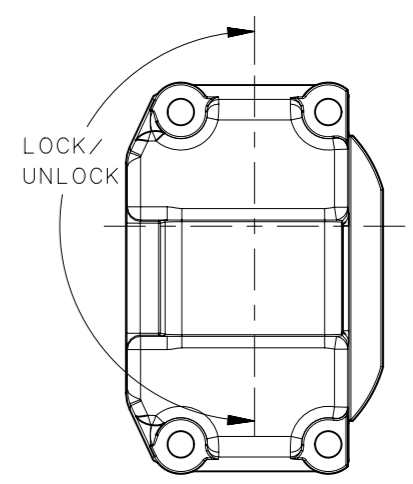
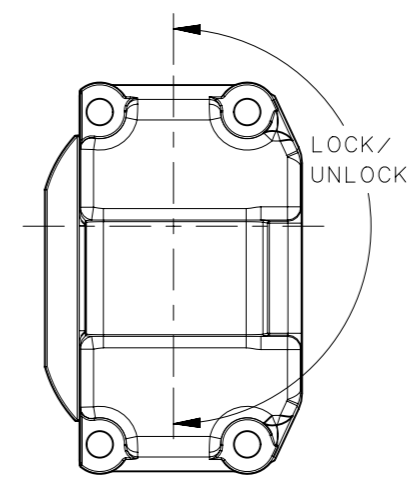
OPTION 2 FOR INSTALLATION OF ROTATION LIMITER - VIEWED FROM BACK-



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

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

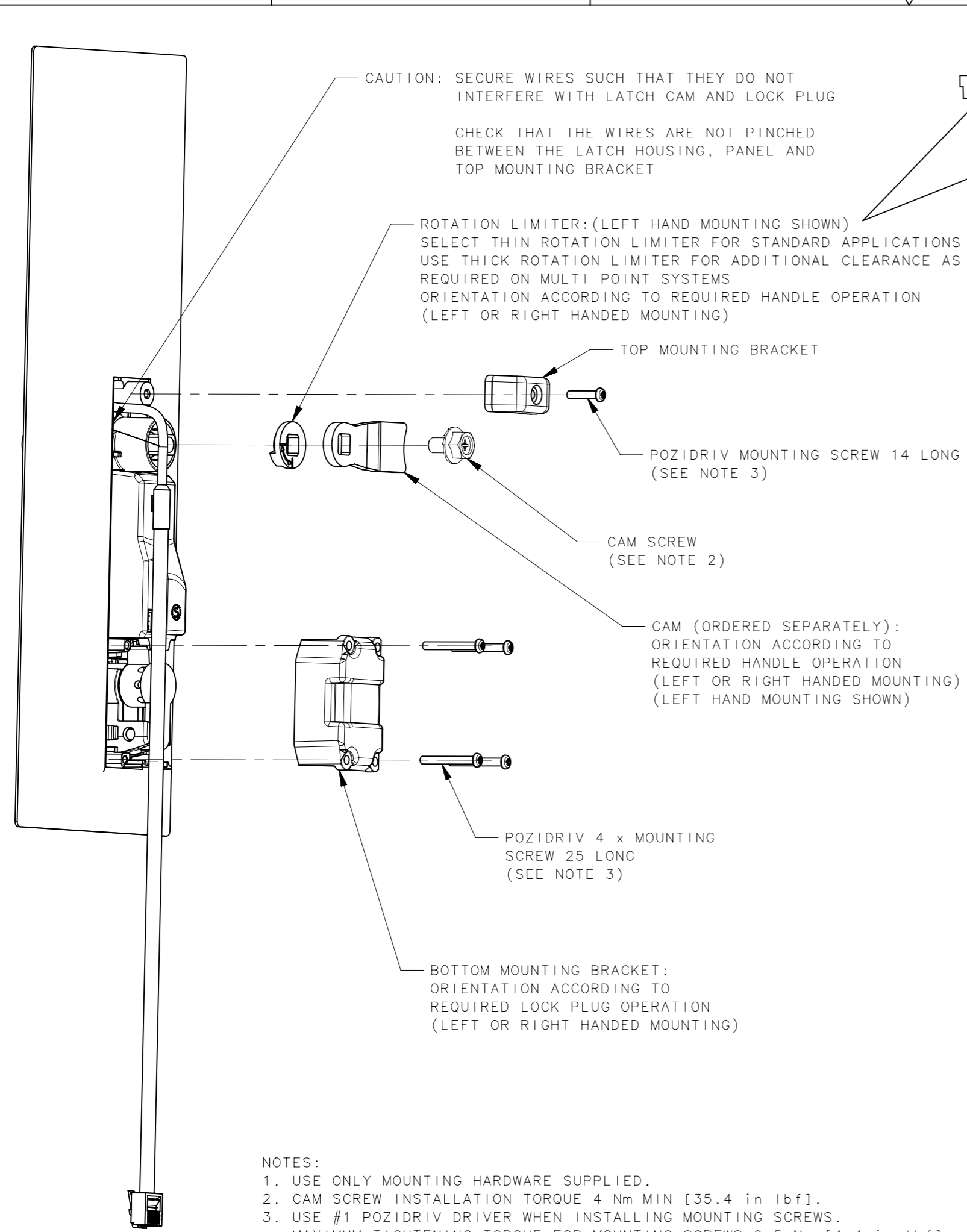
INSTALLATION OF BOTTOM MOUNTING BRACKET



OPERATION OF LOCK PLUG CORRESPONDS WITH ORIENTATION 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.



- NOTES:
1. USE ONLY MOUNTING HARDWARE SUPPLIED.
 2. CAM SCREW INSTALLATION TORQUE 4 Nm MIN [35.4 in lbf].
 3. USE #1 POZIDRIV DRIVER WHEN INSTALLING MOUNTING SCREWS.
 MAXIMUM TIGHTENING TORQUE FOR MOUNTING SCREWS 0.5 Nm [4.4 in lbf].

THIRD ANGLE PROJECTION				 CONNECT · CREATE · INNOVATE		
TOLERANCES UNLESS OTHERWISE NOTED				DESCRIPTION		
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.				H3-EM ELECTRONIC SWINGHANDLE HIGH FREQUENCY		
PROPRIETARY ITEM	SIZE	SYSTEM	DWG NO.	J-H3-EM-64-1		
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		DRAWN BY	DATE	SCALE
	PER ASME Y14.5M-1994	DJK	08OCT2014	SCALE	1:1	SHEET 2 OF 4

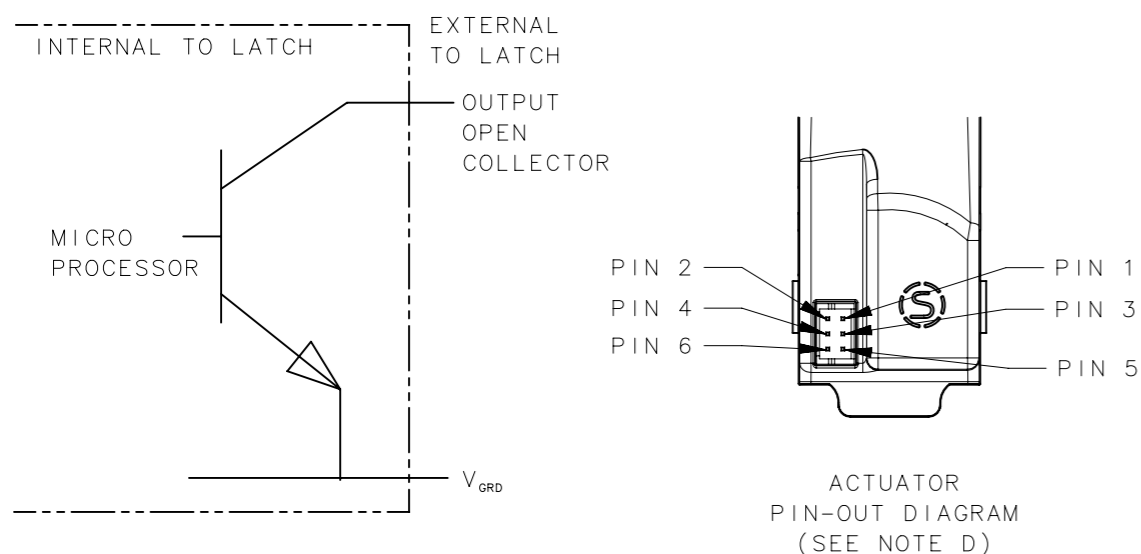
ACTUATOR MODULE

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 RFID READER MODULE)
2	VSUPPLY	12 TO 24 VDC POWER SUPPLY 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



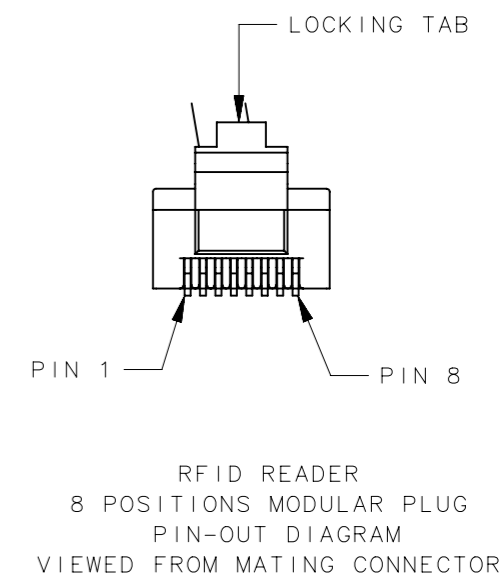
RFID READER MODULE

ELECTRICAL SPECIFICATION:

- F. - SUPPLY VOLTAGE (VCC): 12VDC TO 24VDC
- OPERATING CURRENT: 200mA MAXIMUM (NO EXTERNAL DEVICES ATTACHED)
- TRANSMIT FREQUENCY: 13.56MHz
- DATA SIGNAL VOLTAGE: 5VDC
- DATA PULSE INTERVAL TIME: 40 MICRO-SECONDS (DEFAULT)
- DATA SIGNAL DELAY: 2ms (DEFAULT)
- G. RFID READER CONNECTIONS:
 - 8 POSITIONS MODULAR PLUG
 - SEE PIN-OUT TABLE

PIN-OUT TABLE			
PIN	WIRE COLOR	DESCRIPTION	NOTE
1	WHITE/ORANGE	DATA0	DATA0 OUTPUT
2	ORANGE	DATA1	DATA1 OUTPUT
3	WHITE/GREEN	GREEN LED	GREEN LED INPUT
4	BLUE	HOLD	HOLD INPUT
5	WHITE/BLUE	RED LED	RED LED INPUT
6	GREEN	BUZZER	BUZZER INPUT
7	WHITE/BROWN	VCC	12 TO 24VDC POWER SUPPLY INPUT (MAY BE CONNECTED TO ACTUATOR MODULE V _{SUPPLY} INPUT)
8	BROWN	GROUND	GROUND (MUST BE SAME AS ACTUATOR PORTION)

- H. SEE J-H3-EM-64-100-M ELECTRONIC SWINGHANDLE OPERATING INSTRUCTIONS FOR MORE INFORMATION.
- I. OPERATING TEMPERATURE: 0 TO 45° C



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	THIRD ANGLE PROJECTION		
	MILLIMETERS [IN]		
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION H3-EM ELECTRONIC SWINGHANDLE HIGH FREQUENCY	
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE A3	SYSTEM NX
PROPRIETARY ITEM	PER ASME Y14.5M-1994	DWG NO. J-H3-EM-64-1	DATE 08OCT2014
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			SHEET 3 OF 4

LATCH STATUS DEFINITION

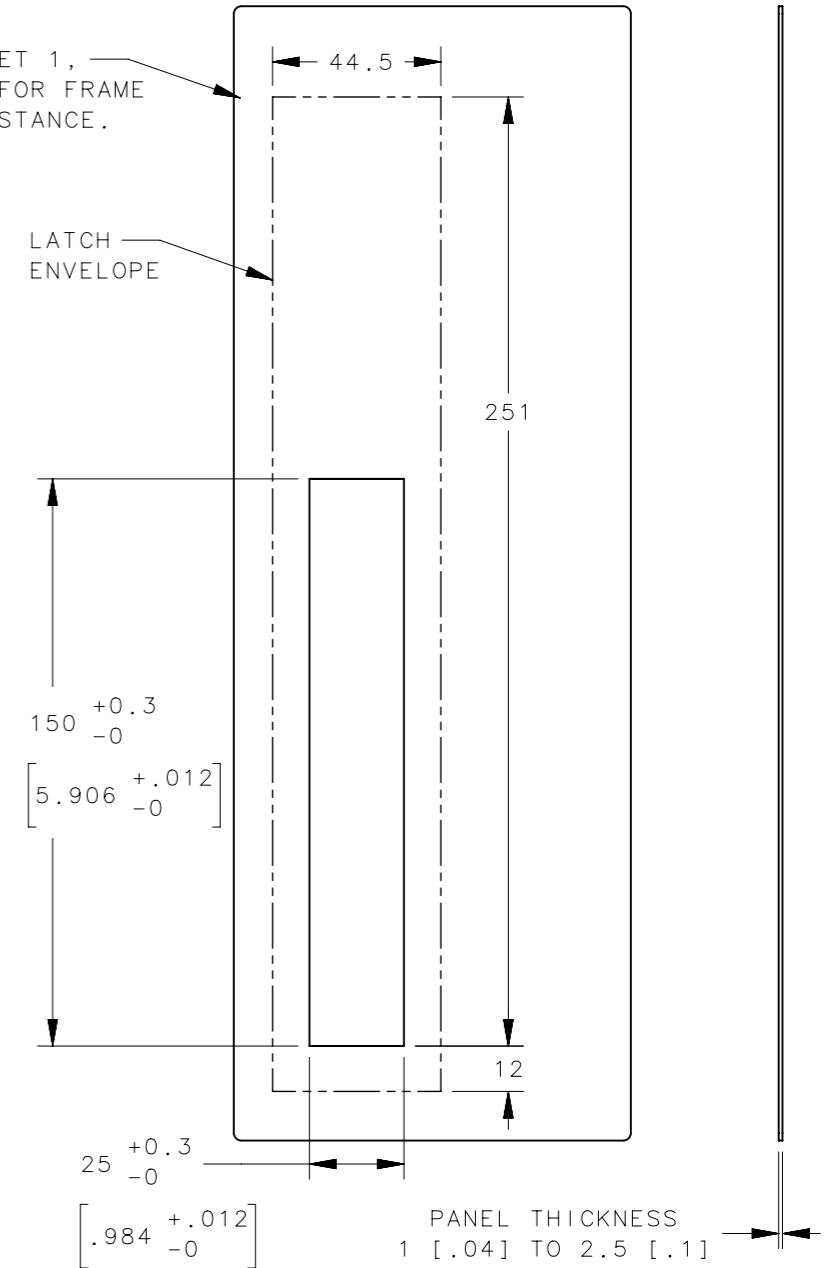
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
G	13MAR2018	DJK/KAM	PRN: P2018-1469

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-64-LLL			
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	
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 SEPARATELY
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	
CAM SCREW	STEEL	ZINC PLATE + BRIGHT CHROMATE	
CAM	STEEL	ZINC PLATE + BRIGHT CHROMATE	ORDER SEPARATELY
RFID READER MODULE	DETAILS ON REQUEST	DETAILS ON REQUEST	
BLANK LOCK PLUG	DIE CAST ZINC	CHROME PLATE	OPTIONAL
SLIDE SPRING	302 STAINLESS STEEL	NATURAL	

SEE SHEET 1,
NOTE 2 FOR FRAME
EDGE DISTANCE.



PANEL PREPARATION

NOTE: THER MUST BE 127mm [5"] OF SPACE
BETWEEN LATCHES TO OPERATE CORRECTLY

THIRD ANGLE PROJECTION 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>		southco [®] CONNECT • CREATE • INNOVATE		
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	SIZE A3	SYSTEM NX	DWG NO. J-H3-EM-64-1	
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