EXCEL CELL ELECTRONIC CO., LTD.	NO.		A31251	
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ECS - INDUSTRIAL CONTROL SWITCH EMERGENCY STOP (Ø16 TYPE)

1. FEATURES

- Pushlock turn reset function.
- Faston terminal #110 makes for easy connections.
- IP65 waterproof type. It is designed for liquid and oil prevention and enables to be used in different environment.
- In accordance with the standards of UL, cUL, CE, CCC, and TUV.
- Quick and easy assembly, just install into the mounting hole and lock the nut.

2. SPECIFICATIONS

2-1. ELECTRICAL

2-1-1. Rated thermal current 5A 2-1-2. Rated insulation voltage 250V

2-1-3. Utilization category AC-15 or Ue 125V / le 3A Ue 250V / le 1.5 A

DC-13 or Ue 30V / le 1A Ue 125V / le 0.22 A Ue 250V / le 0.1A

2-1-4. Minimum switching capacity [ref.] 5V DC/AC, 1mA

2-1-5. Dielectric strength 2500V AC, 1 min. 2-1-6. Insulation resistance $100M\Omega$ min. at 500V DC

2-1-7. Contact resistance $50m\Omega$ max. (initial) 2-1-8. Conditional short-circuit current 1000A

2-1-9 Short-circuit protective device 6A gG fuse

2-2. MECHANICAL AND ENVIRONMENTAL

2-2-1. Operating temperature 2-2-2. Storage temperature

2-2-3. Humidity

2-2-4. Degree of protection 2-2-5. Degree of contamination

2-2-6. Vibration resistance

2-2-7. Shock resistance

2-2-8. Mechanical Life 2-2-9. Electrical Life

2-2-10. Operation Force (from 2b)[ref.]

2-2-11. Operation travel 2-2-12. Connection type

2-2-13. Direct opening action

-25°C ~ +60°C (no freezing)

 -40° C ~ $+80^{\circ}$ C (no freezing)

45% ~ 85% RH(no condensation) IP65 (from the front of the panel)

3 (IEC 60947-5-1)

10~500Hz single amplitude 0.35mm

acceleration 50 m/s²

150 m/s² (operating extremes)

1000 m/s² (damage limits)

100,000 operations (10 operations/min.)

100,000 operations (20 operations/ min.)

14N

over 4 mm

Faston terminal 2.8x0.5 mm Direct opening mechanism of NC

contact to open the circuit→

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3. PART NUMBERING SYSTEM ECS – A 16 R E1 R M X – XX F

— Terminal type: F: Faston terminal #110 Contact configuration: See table 8-2 Special number: Blank or 0~9 or A~Z Options of actuator head: M:Mushroom type Head Color: R: Red Operator type: E1: Emergency Stop Switch Appearance: R: Round Mounting hole dia: 16: Ø16mm TYPE: A: Compact Series Series: ECS: Industrial Control Switch

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4. INSTALLATION

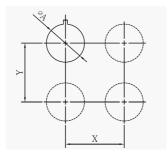
- 4-1. Panel thickness
 - The panel thickness must be 1 to 4 mm.
 - Take into consideration about the thickness of accessories (such as name plate, switch guard, etc.) while using.

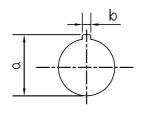
4-2. Panel cutout

■ Cutout diameter and distance

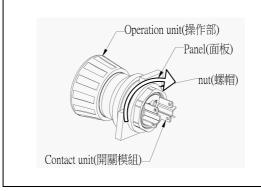
Unit: mm

	16R
ØA	16.2 ^{+0.2} - 0
Х	40
Υ	40
а	17.9 +0.2
b	1.7 +0.2





■ Panel installation



- 1. Place the operation unit through panel mounting hole.
- 2. Install the nut by using tightening tool.
- 3. Make sure the operation unit fix on the panel firmly.

5. PACKAGING

- 5-1. ECS product is packed 1 pcs/bag, 20 bags per box.
- 5-2. Label information
 - (1) Part number
 - (2) Lot number
 - (3) Quantity
 - (4) Tester number
 - (5) Date code

- (6) QC inspection stamp
- (7) Company mark
- (8) Company name
- (9) Notice

6. DIMENSIONS

See attached drawings

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7. OPTIONS

7-1. For other accessories (name plate, control box, and etc.), please refer to accessor part in the catalog.

8. REMARK

8-1. Safety Certification

Safery Standard	Certification			
UL-508	Pending			
CSA C22.2 NO.14	Pending			
EN60947-5-1	R50457863			
EN60947-5-5 (Emergency Stop Switch)	H30457663			
CCC GB14048.5	2021000305000217			

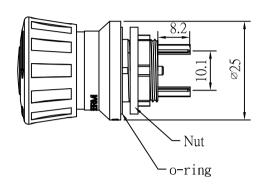
8-2. Contact Configuration

Code	Contac	t blocks	Layout diagram
Code	NO	NC	Layout diagram
01	0	1	11 0 12 1 11 0 12 1 21 0 22
11	1	1	11 0 12 1 11 0 12 1 21 0 22 1
02	0	2	11 0 12 1 12 0 22 1 21 0 22 1

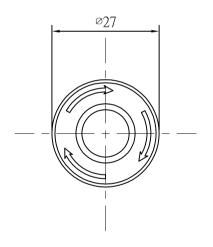
8-3. CAUTION

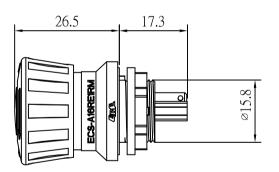
- To prevent injury, this device must be disconnected from all power sources prior to wiring and other initiating work.
- Use tightening tool when installing the operation unit in the panel cutout. Do not use pliers and do not tighten excessively, otherwise the operation unit may be damaged.

ECS-A16RE1RXX-01F











NOTE:

1.CONNECT TYPE:

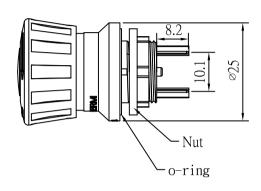
Faston terminals #110 2.8 x 0.5mm

- 2.Panel thickness 1~4mm.
- 3. Operation travel: over 4mm
- 4. Contact configuration:

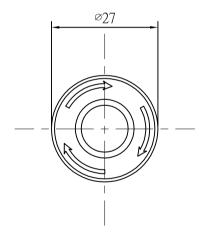
Code		itact ack	Layout diagram
	NO	NC	√ ⊕ \
01	0	1	11012 NO2 2102

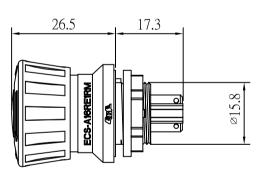
				NORMAL TO RANGE 0-1	TOLERANCE ±0.1	€G€	EXCI	EL CELL I	ELEC	CTRONIC (CO., LTD.	PART NUMBER	ECS-A16	BRE1RXX-01F
				1-4 4-16	±0.3 ±0.5						UNIT	MM (INCH)	PART NAME	ECS(Ø16)
				16-63 63-250	±0.8 ±1.0	H Gar	DESIGN	Alice	DR	Alice	SCALE	1:1	TYPE	Emergency
				X.	±5°	Kuc	SIG	Lin	AW	Lin	SIZE	A4	FILE NAME	769A16RE1RXXXXFA.DWG
NO.	DETAILS	ALTERED BY	DATE	X.X	±2.5°				Ž		PROJECTION	—	EDITION	A

ECS-A16RE1RXX-02F











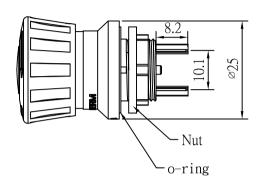
NOTE:

- 1.CONNECT TYPE:
 - Faston terminals #110 2.8 x 0.5mm
- 2.Panel thickness 1~4mm.
- 3.Operation travel : over 4mm
- 4 Contact configuration :

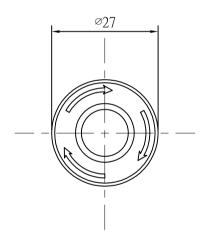
Code		ntact ack	Layout diagram
	NO	NC	(⊕)
02	0	2	11012 11012 21022

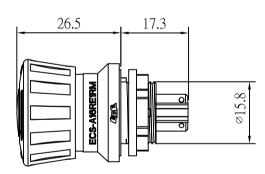
				NORMAL TO RANGE 0-1	TOLERANCE ±0.1	ROF	EXC.	EL CELL I	CLE(CTRONIC (CO., LTD.	PART NUMBER	ECS-A16	SRE1RXX-02F
				1-4 4-16	±0.3 ±0.5						UNIT	MM (INCH)	PART NAME	ECS(∅16)
				16-63 63-250	±0.8 ±1.0	⊞ Gaı	y DES	Alice	DR	Alice	SCALE	1:1	TYPE	Emergency
				X.	<u>±</u> 5°	8 K11		! I	ΑW	Lin	SIZE	A4	FILE NAME	769A16RE1RXXXXFA.DWG
NO.	DETAILS	ALTERED BY	DATE	X.X	±2.5°	X			$ \vec{Z} $		PROJECTION	O	EDITION	А

ECS-A16RE1RXX-11F











NOTE:

1.CONNECT TYPE:

Faston terminals #110 2.8 x 0.5mm

- 2.Panel thickness 1~4mm.
- 3.Operation travel : over 4mm
- 4. Contact configuration:

Code		ntact ack	Layout diagram
	ИО	NC	√ ⊕ √
02	1	1	11012 NOX2 2102

				NORMAL TO RANGE 0-1	TOLERANCE ±0.1	EXCEL CELL ELECTRONIC CO., LTD.				CO., LTD.	PART NUMBER	RT JMBER ECS-A16			
				1-4 4-16	±0.3 ±0.5							UNIT	MM (INCH)	PART NAME	ECS(∅16)
				16-63 63-250	±0.8 ±1.0	CHI	≘ Gary	DE	Alice	딣	Alice	SCALE	1:1	TYPE	Emergency
				X.	<u>±5</u> °	[품]	Kuo	ESIGN	Lin	ΑW	Lin	SIZE	A4	FILE NAME	769A16RE1RXXXXFA.DWG
NO.	DETAILS	ALTERED BY	DATE	X.X ±2.5°				4			PROJECTION	(EDITION	А	