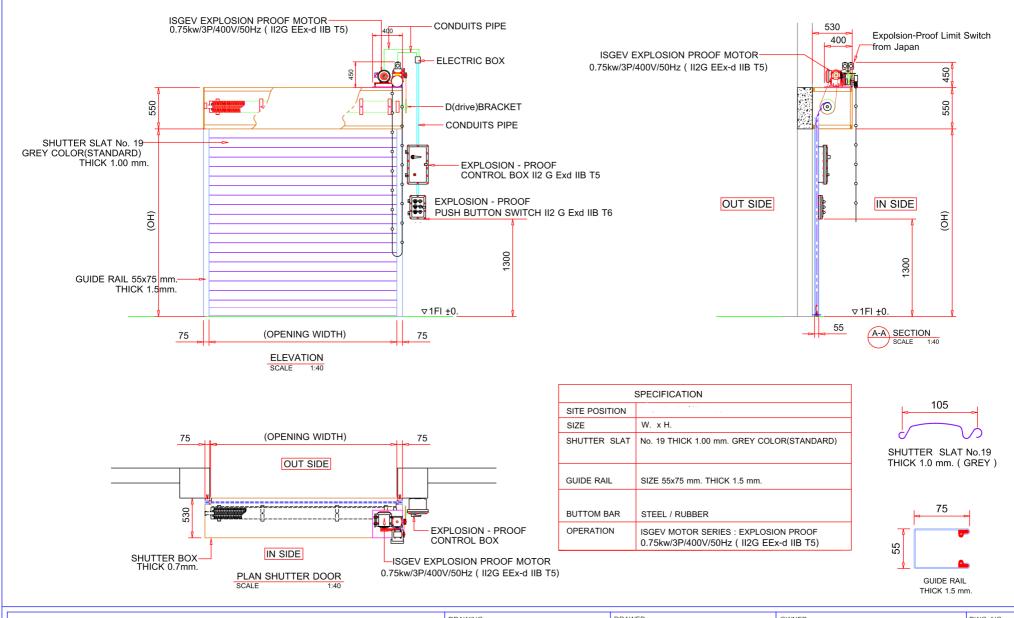






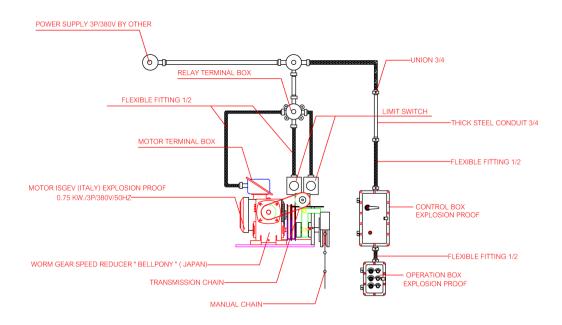
### **TECHNICAL DATA**

| MODEL                        | EXPLOSION TYPE   |  |  |
|------------------------------|------------------|--|--|
| VOLTAGE                      | 3P/400V          |  |  |
| MIN. LOAD                    | 80 (KGS)         |  |  |
| MAX. LOAD                    | 600 (KGS)        |  |  |
| ELEVATED SPEED               | 0.03 M/S         |  |  |
| ROLLER PIPE                  | 5"               |  |  |
| TUBULAR CORE FOR THE GEAR    | #50 9T/50T       |  |  |
| MOTOR OUTPUT POWER (KW)      | 0.75 KW.         |  |  |
| MOTOR SPEED (r.p.m.)         | 1410             |  |  |
| FULL-LOAD CURRENT (A)        | 2 A              |  |  |
| INSULATION CLASS             | CLASS F          |  |  |
| MOTOR WEIGHT (KGS)           | 50 KGS           |  |  |
| EXPLOSION-PROOF CONSTRUCTION | FLAME-PROOF TYPE |  |  |
| USE ENVIRONMENT              | -10° C to +40° C |  |  |
| PLACE OF USE                 | ZONE 1 & ZONE 2  |  |  |



| THAI TOYO ROLLING & INTER SHUTTER                                                      | DRAWING | Adisak C.  | OWNER | DWG. NO. |
|----------------------------------------------------------------------------------------|---------|------------|-------|----------|
| 23/4-5 M.3 BANGBORN-EAKACHAI RD. KHOK KRABUE DISTRICT, AMPHUR MEUNG,SAMUTSAKORN 74000. | SCALE   | DATE       | 1     | 01       |
| TEL. (034)823-730-3,824-402-4,FAX. (034) 892-2122,823-250                              | 1 : 40  | 24/02/2016 |       |          |

#### CONNECTION DETAILS



## CIRCUIT BREAKERS AND MOTOR STARTERS

# **Explosion-Proof Motor Starter Boxes,** TCS, TMS series



#### Compliances:

- UL Standard 698, 877
- North America (NEC 500)

  Class I, Div. 1 & 2, Groups C,D

  Class II, Div. 1 & 2, Groups E,F,G

  Class III

  NEMA 4, 4X, 7 CD, 9 EFG
- North America (NEC 505)
   Class I, Zone 1, AEx d IIB T5

EN Standard Comparison
II 2G Ex d IIB T5 (zone 1, 2)

Ambeint Temperature Range; -40 °C to +55 °C

#### Protection index:

■ IP56 according to IEC 60529 (with O-ring gasket for IP66)

#### **Applications:**

The motor starters and enclosures are suitable for

- hazardous areas due to the presence of flammable gases or vapors, combustible dusts or easily ignitible fibers.
- single speed, non-reversing starting and stopping of AC squirrel cage induction motors.
- direct-on-line or star-delta starting method.
- providing disconnecting means for motor branch circuit short-circuit protection.
- providing motor overload protection.
- indoor or outdoor in damp, wet or corrosive locations.

#### Features:

- Rectangular shape compact designed.
- Circuit breaker, magnetic contactor with overload relay and control equipment are combined in one enclosure.
- Components are mounted on steel plate.
- START/ STOP pushbuttons and transformer-type LED pilot lights are mounted in the front of panel.
- Overload relay can be reset with an external button.
- Breaker handle can be locked in "OFF" position by key.
- Four mounting lugs and ground-point are provided.
- O-ring gasket ensures high degree of water ingress protection.
- Mitsubishi molded-case circuit breakers and magnetic contactors are supplied as standard.
- Remote control for START/ STOP motor is optional provided on request.

#### Materials:

- Body, cover and handle Copper-free aluminium (Cu < 0.2%)
- Mounting plate Sheet steel
   Bolts and operating shaft Stainless steel
   Lamp guard Aluminium
- O-ring gasket Silicone

#### Finishes:

- Copper-free aluminium Epoxy-polyester powder coated, RAL 7037
- Sheet steel, steel Zinc electro-plated
- Stainless steel Natural
- Aluminium Chromium plated

#### Electrical rating range:

- Supply; 380/220V.AC. 50Hz. 3-Phases 4-Wires
- Circuit Breaker; 32, 63, 125, 160, 250, 400 Ampere frame.
- Magnetic Contactor;
  - 0.37 to 132 kW. for D.O.L. starting 3 to 75 kW. for star-delta starting

#### **Options:**

- Metric threads
- O-ring gasket (for IP66)
- Others voltage supply, please specify.



#### **Explosion-Proof Control Boxes**, **TCT** series



#### Compliances:

- UL Standard 698
- North America (NEC 500) Class I, Div. 1 & 2, Groups C,D Class II, Div. 1 & 2, Groups E,F,G Class III
  - NEMA 3, 4, 4X, 7 CD, 9 EFG
- North America (NEC 505) Class I, Zone 1, AEx d IIB T6

**EN Standard Comparison** II 2G Ex d IIB T6 (zone 1, 2)

Ambeint Temperature Range; -40 °C to +55 °C

#### Protection index:

■ IP56 according to IEC 60529 (with O-ring gasket for IP66)

#### Applications:

- For use in hazardous locations due to the presence of flammable gases or vapors, combustible dusts or flying fibers, such as oil refineries, petrochemical plants, paint manufacturing plants, flour mills, powder paint process areas.
- use in conjunction with contactors or magnetic starters for remote control of motors in hazardous locations.
- Suitable for indoor, outdoor or wet and corrosive locations.

#### Features:

- High tensile strength copper-free aluminium bodies with corrosion resistant.
- All threaded joints are flametight.
- Conduit openings drilled as per customer requirements.
- Rectangular shape, bolted cover.
- Silicone gasket ensures high degree of water ingress protection.
- The TCT series of housing accommodate the following type of control devices;
  - Momentary or alternate pushbuttons
  - Emergency stop mushroom pushbuttons
  - Pilot lights (LED)
  - Selector switch
  - Ammeter or voltmeter (size 72 x 72 mm.)
  - Potentionmeter
  - Others devices (contact us)



#### Materials:

- Body, cover and hinge Copper-free aluminium (Cu < 0.2%)</p>
- Bolts and handle - Stainless steel
- Steel Mounting plate
- O-ring gasket - Neoprene

#### Finishes:

- Copper-free aluminium Epoxy-polyester powder coated, RAL 7037
- Stainless steel - Natural
- Steel Zinc electro-plated