



## Safety Instructions X touch

Rev.:1

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[www.coel-is.com](http://www.coel-is.com)

## **Safety Instructions Pendant Stations ATEX – IEC Ex**

### **DESCRIPTION**

The X Touch pendant control stations are built in 5 models. They are made out of an enclosure in aluminum or steel. Inside the enclosures it is possible to insert switches, thermal protectors and a resistances as anti condensation heater. The pendant stations are intended to be used in industrial areas and in particular for Hazardous Locations. For ATEX and IECEx zones are 1, 2, 21, 22.

The enclosures are made in Aluminum UNI 8024 or steel C40 or AISI 316 for ATEX and IEC Ex versions.

It is included in all of X Touch types one OR.

The X Touch series is built for ATEX-IEC Ex in conformity with:

EN 60079-0:2012  
EN 60079-1:2014  
EN 60079-31:2014

IECEx:

IEC 60079-0:2012  
IEC 60079-1:2014  
IEC 60079-31: 2013

Atex is in conformity with 2014/34/EU

The X Touch line is suitable to be installed in hazardous locations

Atex:

Ex II 2G Ex db IIC T6 Gb  
Ex II 2D Ex tb IIIC T85°C Db  
Tamb: -20°C;+60°C

IECEx:

Ex db IIC T6 Gb  
Ex tb IIIC T85°C Db  
Tamb: -20°C;+60°C

### **ELECRICAL FEATURES**

Inside built switches are of one type only suitable for VDC250 A1.1 Max or VAC 240V 3A Max 50/60 Hz.

It is also possible to mount anti condensation heaters having the following maximum power 24W as option only.

In order to limit the over temperature of the enclosures when the heater is present, it is applied a thermal protector **having temperature action at 70°C ±5°C. The thermal protector is of PTO type.**

The external supply cable must have minimum section of 0.75 sqmm per contact and ground as well. The maximum allowed section is 2 sqmm.

**Ground terminals:**

X touch stations are provided with 2 ground point connections, one inside terminal box, one outside. Both of them must be connected to wires having section minimum as the phase one.  
 Connection must be in conformity with EN/IEC 60079-0 tab 10.

**Cable Entry**

All the devices for cable entry (cable gland, adapters) must be certified with minimum certification level as per valid certification of the pendant station

Ambient temperature -20 +85 °C

Minimum number of threading as per IEC 60079

**Marking and Nomenclature**

All models Atex and IEC Ex are built in the same way and marked for both certifications as described

Type: TA (means Atex-IEC Ex version)

Number of contacts: 4; 6; 8; 12; 16

If heater is installed: H

In the code indication for threading of cable gland is indicated as follows

NPT 1/2 : N1

NPT 3/4 : N2

NPT 1 : N3

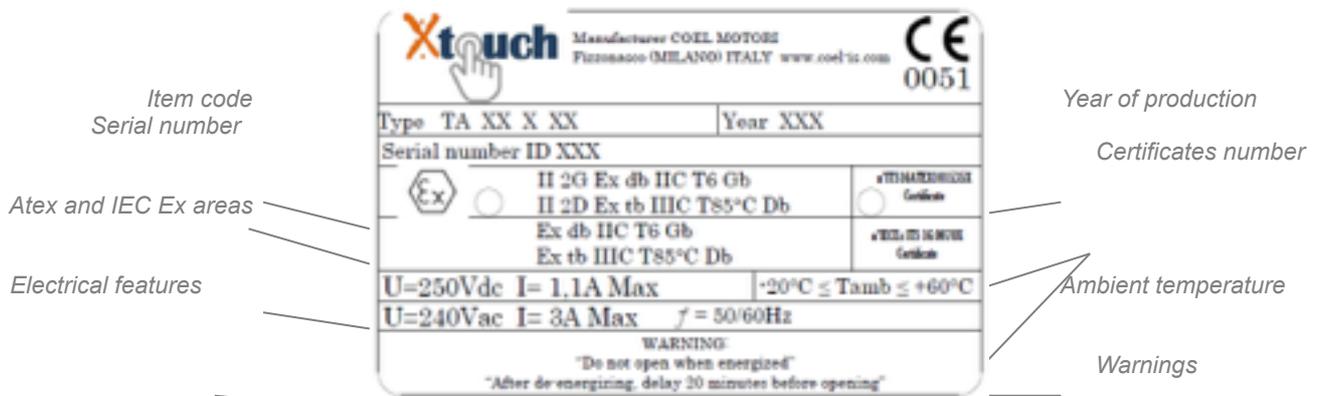
M20x1,5 : M1

M25x1.5 : M2

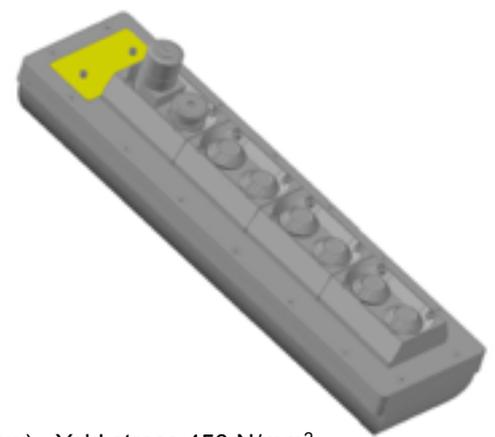
M32x1.5 : M3

Model type example: TA 8 H M1

a detailed part of nameplate will show the cable entry type



Name plate is made of steel and placed on the station as described in the picture  
 In case of double body type, it will be on the right one.



**ADDITIONAL NOTES**

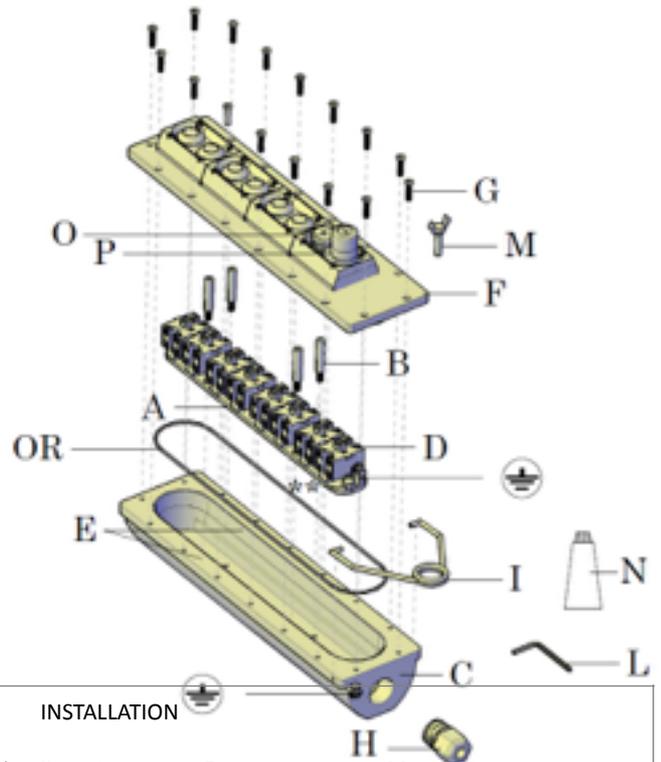
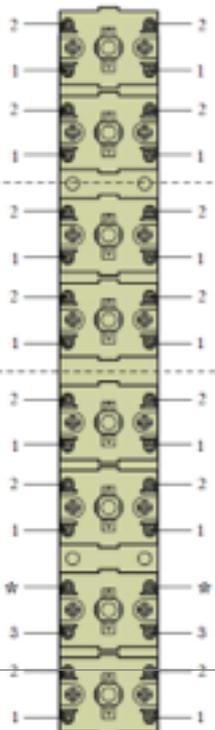
Screws are M 5x20 (see G on the exploded view) and M 5x35 (see Q on the exploded view) - Yeld stress 450 N/mm².



TA8

TA6

TA4



**DESIGNATION**

TA4= 2 bottoms double step + 1 key (P) + 1 emergency (O)  
 TA6= 4 bottoms double step + 1 key (P) + 1 emergency (O)  
 TA8= 6 bottoms double step + 1 key (P) + 1 emergency (O)

- Contacts 1 and 2 are NO
- Contact 1 is activated with the first step of the bottom
- Contact 2 is activated with the second step of the bottom
- Contact 3 is NC
- Key P is a double step key for power on and start on operation
- Emergency bottom O to be manually reactivated in case of use

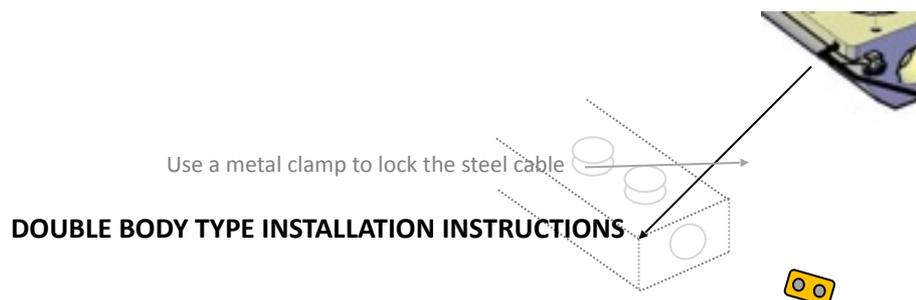
\*Terminals without switch to be used to connect the anti condensation heater (if equipped) - Locking force for screws 1 Nm

\*\*Thermal protector PTO To prevent over heating of anti condensation heater (if equipped)

**INSTALLATION**

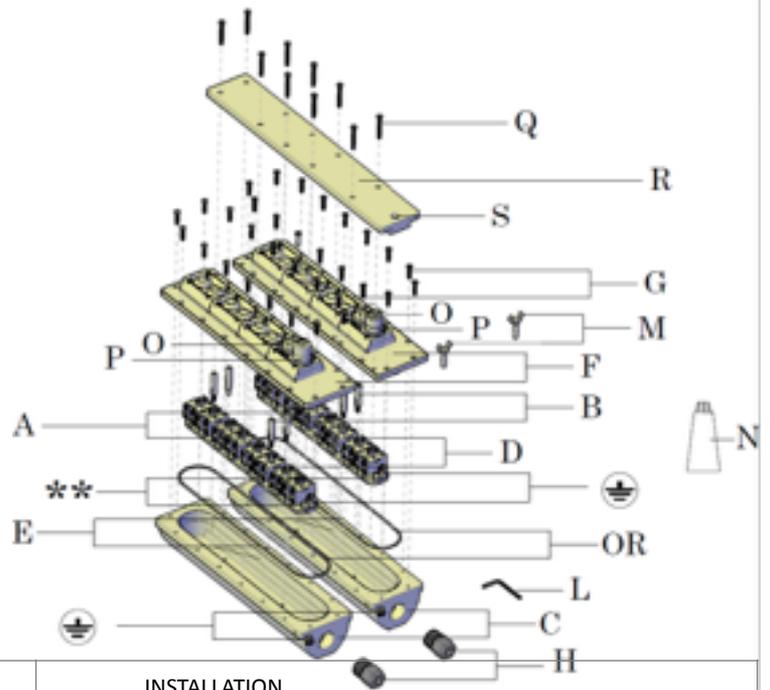
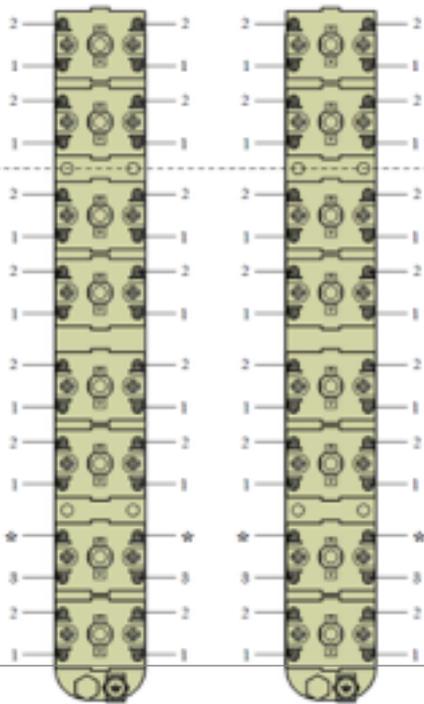
- 1) Open the covers F using the screws M
- 2) Unscrew the B pins using the key L supplied with the pendant station
- 3) Extract the switches layer A
- 4) Insert the cable through the conduit or cable gland H (not supplied) and through the hole C
- 5) Connect the wires to the switches D. Locking force of screws is 1Nm.
- 6) Lock the switches layer A to the base using the pins B. Locking force is 4,5 Nm.
- 7) Put the lithium grease N on the lamination junction E of the terminal box cover
- 8) Close the terminal box F
- 9) Fix the screws G with a torque value of 6,3Nm
- 10) Assemble the holding hook I on the base
- 11) Connect the external ground terminal
- 12) Fix the steel holding cable to the holding hook\*

The holding cable must have a length of 5cm shorter than the power supply cable in order to prevent the cable stress  
 The weight of the pendant station must be hold by the steel holding cable only.



TA16

TA12



DESIGNATION

TA12= 8 bottoms double step + 2 keys (P) + 2 emergency (O)  
 TA16= 12 bottoms double step + 2 keys (P) + 2 emergency (O)  
 -Contacts 1 and 2 are NO  
 -Contact 1 is activated with the first step of the bottom  
 -Contact 2 is activated with the second step of the bottom  
 -Contact 3 is NC  
 - Key P is a double step key for power on and start on operation  
 - Emergency bottom O to be manually reactivated in case of use

\*Terminals without switch to be used to connect the anti condensation heater (if equipped) – Locking force for screws 1 Nm

\*\*Thermal protector PTO  
 To prevent over heating of anti condensation heater (if equipped)

INSTALLATION

- 1) Unscrew the screws Q and remove the junction plate P
- 2) Open the covers F using the screws M
- 3) Unscrew the B pins using the key L supplied with the pendant station
- 4) Extract the switches layer A
- 5) Insert the cable through the conduit or cable glands H (not supplied) and through the holes C
- 6) Connect the wires to the switches D. Locking force of screws is 1Nm.
- 7) Lock the switches layer A to the base using the pins B. locking force is 4,5 Nm.
- 8) Put the lithium grease N on the lamination junctions E of the terminal box cover
- 9) Close the terminal boxes F and fix the screws G with a torque value of 6,3Nm and apply the plate R
- 10) Fix Q with a torque value of 6,3Nm
- 11) Connect the external ground terminal
- 12) Fix the steel holding cable to the holding hole on R plate

The holding cable must have a length of 5cm shorter than the power supply cable in order to prevent the cable stress  
 The weight of the pendant station must be hold by the steel holding cable only.



Use a metal clamp to lock the steel cable



**EU Declaration of conformità**

*The Manufacturer:* Via Campania 40 COEL Motori srl  
20090 – Fizzonasco di Pieve Emanuele – MI  
ITALY

*declares under own sole responsibility that the product:*

Certified: **XTOUCH**  
**ITS16ATEX101535X / IECEx ITS 16.0070X**

The X Touch TA series is built in conformity with:

Atex,

EN 60079-0:2012  
EN 60079-1:2014  
EN 60079-31:2014

Atex is in conformity with 2014/34/EU – ATEX 95, group II, category 2GD.

IECEX,

IEC 60079-0:2012  
IEC 60079-1:2014  
IEC 60079-31:2013

The X Touch line is suitable to be installed in hazardous locations for Atex and IECEx zones are 1, 2, 21, 22.

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IECEX:

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Ex tb IIIC T85°C Db

Tamb: -20°C;+60°C

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*Managing director*



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