

# Hazardous Area Equipment

## Product Guide

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CDO Exd, MDF Exd, STA Exd  
EXI Safety Beam  
EXD Starter



# Product Range

## EXD Door Operators

Marantec UK's EXD door operators range, including MDF, STA, and CDO operators, offers robust and reliable solutions for hazardous and explosive environments.

### CDO Exd 50/50B

- Flangemount
- 3 Phase Motor



### CDO Exd 200B

- Flangemount
- 3 Phase Motor



### CDO Exd 300B

- Flangemount
- 3 Phase Motor



### MDF 20-22-12 Exd

- Flange Direct Drive
- 3 Phase Motor



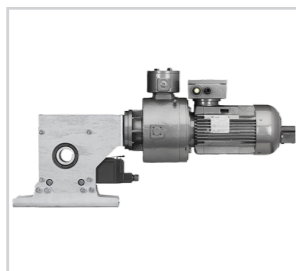
### MDF 30-40-15 Exd

- Direct Drive
- 3 Phase Motor



### MDF 50-75-10 Exd

- Direct Drive
- 3 Phase Motor



### STA 1-11-24 Exd

- Sectional Door Operator
- 3 Phase Motor



## Accessories for Hazardous Areas

Marantec UK's accessories for hazardous areas, including the EXD Starter and EXI Safety Beam, provide essential safety and control enhancements for secure operation in explosive environments.

### Exd Starter

- Exd Starter for Exd Door Operators



### EXI Safety Beam

- EXI Safety Beam



# Lifting Charts

## Lifting Charts - for MDF Exd Operators

To select the optimal operator solution, the diameter of the winding shaft in mm and the curtain weight of the door in kg are required. With the help of these parameters, the correct Ex Slip-on operator can be determined easily and reliably using the table below.

Maximum curtain weights roller shutter operators 1:1 in kg

Ø Winding Shaft	30-40-15 EX e	30-40-15 Ex de	50-75-10 Ex de
101.6mm	515	515	966
108.0mm	491	491	920
133.0mm	413	413	774
159.0mm	355	355	665
177.8mm	322	322	603
193.7mm	298	298	559
219.1mm	267	267	501
244.5mm	242	242	454
273.0mm	219	219	410
298.5mm	202	202	378
323.9mm	187	187	351

## Lifting Charts - for STA Exd Operators

To select the optimal operator solution, the area of the door in m<sup>2</sup> is required. With the help of these parameters, the correct sectional door operator can be determined easily and safely using the table below.

### Door Size

STA 1-11-24 Ex e	Door Area (max.) (m <sup>2</sup> )
STA 1-11-24 Ex de	45

The table values take into account a weight of 13 kg/m<sup>2</sup> and assume exact spring balancing. In certain situations, the friction may be greater and must be added up accordingly.



# Technical Data

## CDO Exd Operators

The CDO Exd motors are specially designed for optimal performance in hazardous areas, offering reliable operation and safety in explosive atmospheres.

Technical Information	CDO-50	CDO-50B	CDO-200B	CDO-300B
Power (kW)	0.37	0.37	0.75	1.5
Torque (Nm)	92	73	143	332
Output Speed (R.P.M.)	24	28	28	28
Environmental Protection	IP.54	IP.54	IP.54	IP.54
Current (Amps)	1.1	1.1	1.9	3.8
Power Supply	400V 3ph 50Hz			

## MDF Exd Operators

The MDF Exd motors are specially designed for optimal performance in hazardous areas, offering reliable operation and safety in explosive atmospheres.

Technical Information	MDF 20-22-12 Exd	MDF 30-40-15 Exd	MDF 50-75-10 Exd
Power (Kw)	0.75	1.1	1.5
Torque (Nm)	220	400	750
Output Speed (rpm)	12	15	10
Operating Voltage/ Phase	400V 3ph 50Hz	400V 3ph 50Hz	400V 3ph 50Hz
Motor Current (A)	2.1	2.4	3.8
Protection Rating (IP)	55	55	55
Temperature Range (°C)	-5 / +40	-5 / +40	-5 / +40

## STA Exd Operators

The STA Exd motors are specially designed for optimal performance in hazardous areas, offering reliable operation and safety in explosive atmospheres.

Technical Information	STA 1-11-24 Exd
Power (Kw)	0.55
Torque (Nm)	110
Output Speed (rpm)	24
Operating Voltage/ Phase	400V 3ph 50Hz
Motor Current (A)	1.6
Protection Rating (IP)	54
Temperature Range (°C)	-5 / +40

# Product Features

## CDO, MDF, STA Exd Operators



Mechanical limit switches encapsulated (MDF)



Mechanical limit switches encapsulated (STA)



Can be combined with ATEX control



Can be combined with ATEX accessories



Mechanical limit switches encapsulated (MDF)

# Technical Data

## Technical Data for EXI Safety Beam

The EXI Safety Beam retroreflective photocell is a safety device from the hazardous area equipment range that is to be used in intrinsically safe barriers in explosive environments.

Technical Information	EXI Safety Beam
Cable	2 m (6.5 ft)
Performance	680 nm, visible red (Range: 9 m (30 ft))
Output Type	Constant Current $\leq 1.2$ mA dark $\geq 2.1$ mA light
Supply Voltage	5-15 V dc
Exd Rating	EEx ia IIC T6
IP Rating	IP 67

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