

SIGNALING UNITS

series
DP - DFP

Protection	Gas	Zone	1-2	II2G	Ex d IIC or IIB+H ₂ Gb
	Dusts	Zone	21-22	II2D	Ex tb IIIC Db

Grade of Protection	IP 66
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Amb. Temp.	Standard Extended		-20°C		+40°C
			-50°C		+80°C



Standards and Certificates



Directive 2014/34/EU (ATEX)

EN 60079-0 • EN 60079-1 • EN 60079-31

U INERIS 14 ATEX 9009U



IEC 60079-0 • IEC 60079-1 • IEC 60079-31

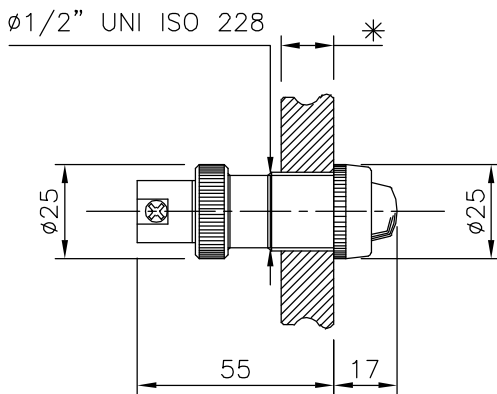
IECEx INE 14.0023U

- For COELBO enclosures Series CCA - CCF (see section B)
- The 1/2" Series for its compact size allows to reduce the overall dimensions of the enclosures where they are mounted
- Body in Zinc plated Brass
- Ring nuts in Chrome plated Brass and/or Polycarbonate
- Drive shafts in Stainless Steel
- Optical components in tempered glass
- Colored filters in self-extinguishing polycarbonate

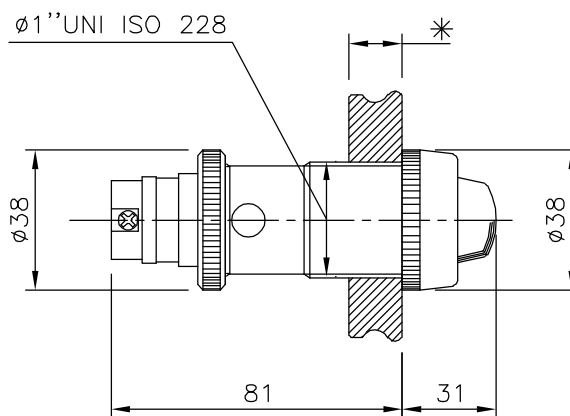
Options

- LED light (series LD...)

- Incandescence Lamp (series LI...)



DP
Threading 1/2" ISO 228
Lamp holder BA 9S
Power ≤ 2,5 W
Weight: 80 g



DFP
Threading 1" ISO 228
Lamp holder E14
Power ≤ 5 W
Weight: 210 g

Signaling Unit	
Color	Id code
Red	R
Green	V
Yellow	G
White	B
Blue	A

Example: DP R

Order Coding

Type
DP = 1/2" Unit
DFP = 1" Unit

Lamp color (see table)
R = Red

NOTES

The control and signaling units get same temperature class as the housing on which they are mounted.

These units shall be installed on enclosure with volume up to 160,6 dm³ for group IIB+H₂ and up to 62,9 dm³ for group IIC.

These units may be mounted on electrical equipment suitable for group I-M2 (firedamp mines) if no component is made of light alloy. The resulting mode of protection will be Ex d I Mb.

(*) See page B11 for CCA and page B21 for enclosures CCF.
Remark: lamp is supplied on request.

MUSHROOM TYPE PUSH BUTTON CONTROL UNITS

series
DP - DFP

Protection	Gas	1-2	II2G	Ex d IIC or IIB+H ₂ Gb
	Dusts	Zone 21-22	II2D	Ex tb IIIC Db

Grade of Protection	IP 66
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+80°C



Standards and Certificates



Directive 2014/34/EU (ATEX)

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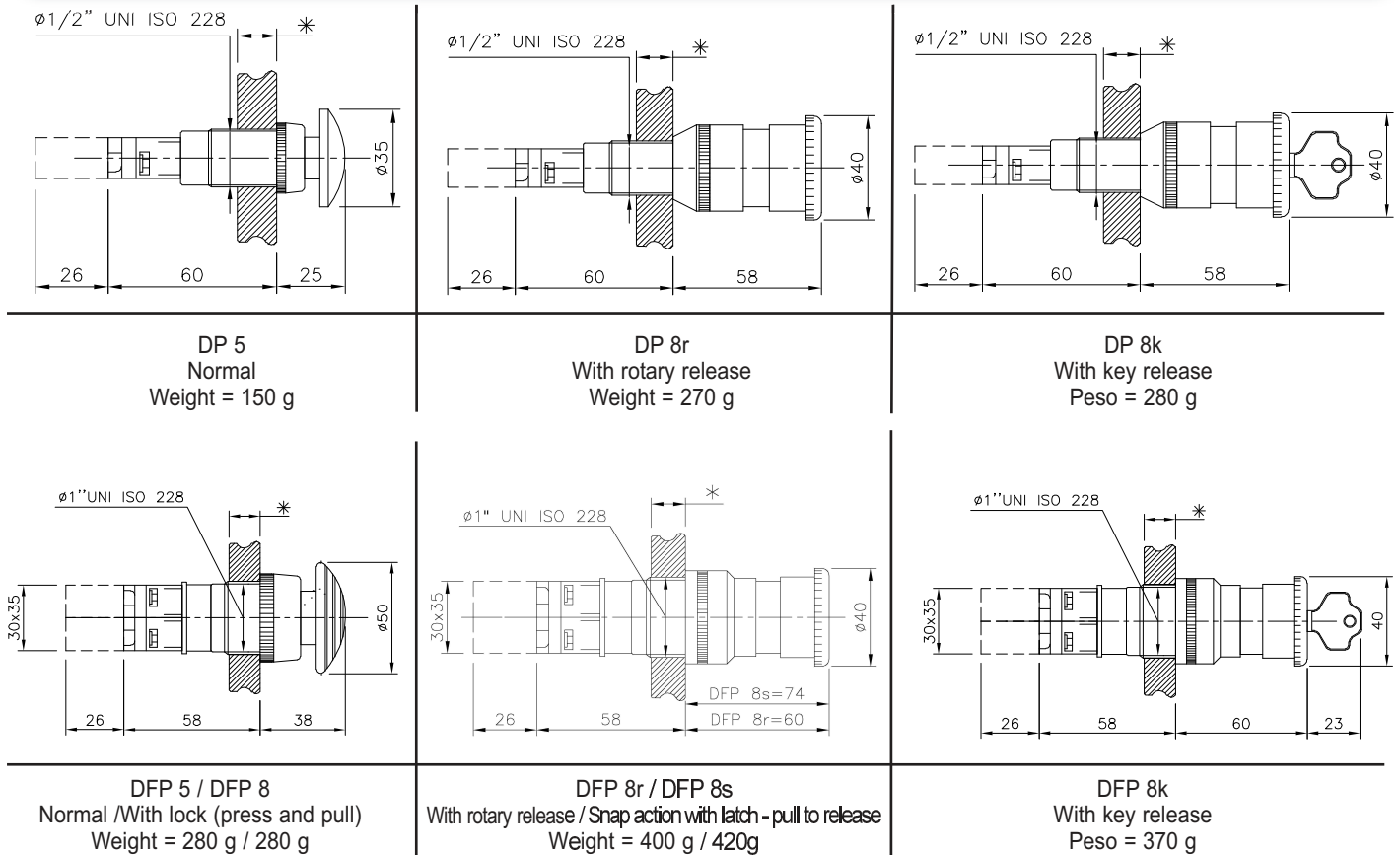
U INERIS 14 ATEX 9009U



IEC 60079-0 • IEC 60079-1 • IEC 60079-31

IECEX INE 14.0023U

- For COELBO enclosures series CCA - CCF (see section B)
- The 1/2" Series for its compact size allows to reduce the overall dimensions of the enclosures where they are mounted
- Body in Zinc plated brass
- Rings in Chrome plated brass and/or Chrome plated polycarbonate
- Drive shaft in Stainless Steel
- Mushroom push button in painted Aluminum or plastic.



Ø 1/2"		Ø 1"		Units
Code	Contacts	Code	Contacts	
DP 5	NO + NC	DFP 5	NO+ NC	Normal (with spring return and no lock)
-		DFP 8		With lock (press and pull)
DP 8r		DFP 8r		With rotary release
DP 8k		DFP 8k		With key release

NOTES

The control units get same temperature class as the housing on which they are mounted.

These units shall be installed on enclosure with volume up to 160,6 dm³ for group IIB+H₂ and up to 62,9 dm³ for group IIC.

These units may be mounted on electrical equipment suitable for group I-M2 (firedamp mines) if no component is made of light alloy.

The resulting mode of protection will be Ex d I Mb.

(*) See page B11 for CCA and page B21 for enclosures CCF.

Order Coding

Example: DP 8r

Type	Element (see Table)
DP = 1/2" unit	8r = rotary release
DFP = 1" unit	

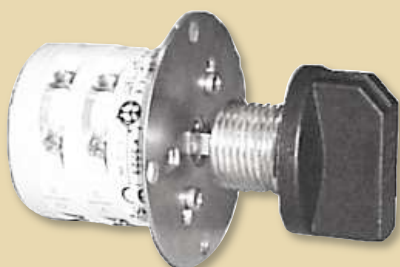
KNOB OPERATED CONTROL UNIT

series
DP - DFP

Protection	Gas	Zone	1-2	II2G	Ex d IIC or IIB+H ₂ Gb
	Dusts	Zone	21-22	II2D	Ex tb IIIC Db

Grade of Protection	IP 66
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Amb. Temp.	Standard	-20°C	+40°C



Standards and Certificates



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U INERIS 14 ATEX 9009U



IEC 60079-0 • IEC 60079-1 • IEC 60079-31

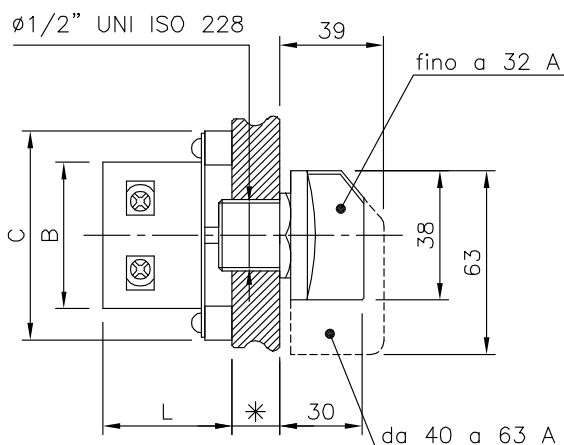
IECEX INE 14.0023U

- For COELBO enclosures series CCA - CCF (see section B)
- Specific to operate rotary cam rotary switches
- Bush in galvanized brass
- External knob in polycarbonate

Options

- External knob pad-lockable (suffix "L")

KNOB OPERATED CONTROL UNIT



Electrical data:

- Current: $I_{max} = 63 A$
- Voltage: $V_{max} = 500 V$
- Frequency = 50/60 Hz

Main Function	ID letter (°)	Size (Nominal current)
Switch Pos. 0-1	I	1 (10 A)
Three position changeover switch (pos.1-0-2 (pos.1-0-2))	C	3 (16 A)
Two position changeover switch (pos.1-2)	D	5 (25 A)
Reverser switch (pos.1-0-2)	R	6 (32 A)
Connecting Switch (by diagram)	M followed by the diagram code	7 (40 A)
		9 (63 A)

NOTES

The control and signaling units get same temperature class as the housing on which they are mounted.

These units shall be installed on enclosure with volume up to 160,6 dm³ for group IIB+H₂ and up to 62,9 dm³ for group IIC.

These units may be mounted on electrical equipment suitable for group I-M2 (firedamp mines) if no component is made of light alloy. The resulting mode of protection will be Ex d I Mb.

(*) See page B11 for CCA and page B21 for enclosures CCF

(°) Diagrams C - D - R - M are available up to size 6 (32 A).

Size	B	C	L											Weight (g)
			Switch		Three position changeover switch			Two position changeover switch			Reversers switch			
			Poles n°		Poles n°			Poles n°			Poles n°			
1 - 3	43	60	38	50	38	50	62	38	50	62	38	50	62	180
5 - 6	58	90	42	56	42	56	70	42	56	70	42	56	70	240
7 - 9	58	90	56	84	-	-	-	-	-	-	-	-	-	320

The dimensions shown in the table refer to the K series of VANTAGGIMAURI. As alternative switches from other manufacturers may be used, but first check the dimensions and their adaptability.

Example: DP C 23

Order Coding

Type	ID Letter of the switch function	Pole Number	Size
DP = 1/2" unit	C = selector switches	2 = 2 poles	3 = 16 A
DFP = 1" unit			

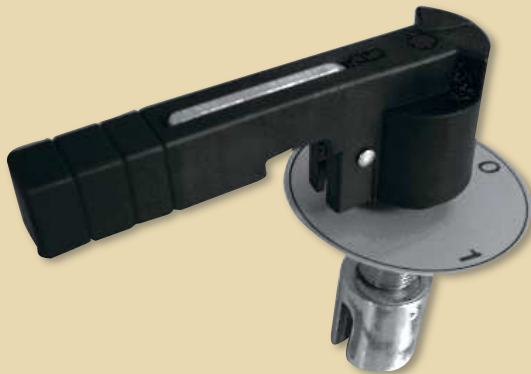
KNOB OPERATED CONTROL UNIT

series
DP - DFP

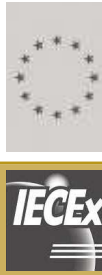
Protection	Gas	1-2	II2G	Ex d IIC or IIB+H ₂ Gb
	Dusts	Zone 21-22	II2D	Ex tb IIIC Db

Grade of Protection	IP 66
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Amb. Temp.	Standard	-20°C	+40°C



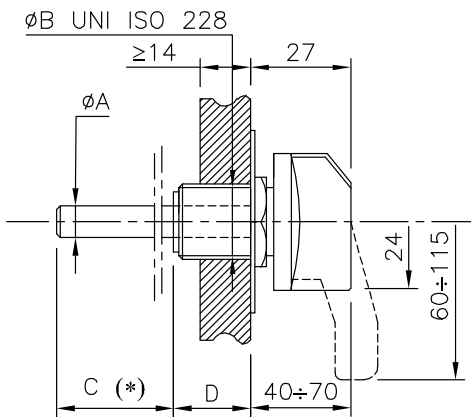
Standards and Certificates



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IEC 60079-0 • IEC 60079-1 • IEC 60079-31	
IECEx INE 14.0023U	

- For COELBO enclosures series CCA - CCF (see section B)
- Specific to operate rotary shafts of isolators, MCB, MCCB, MPCB, etc.
- Bush in tropicalized brass
- Drive shaft in Stainless Steel
- Internal leverages in light alloy
- External knob in polycarbonate

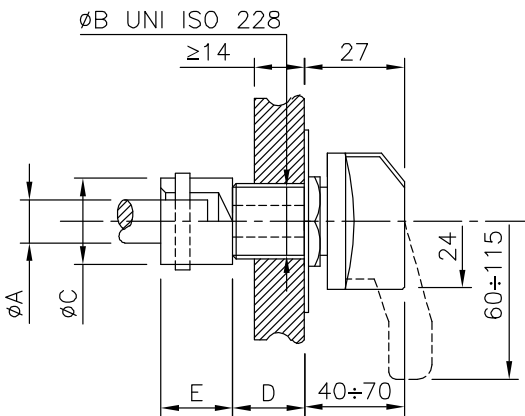
Options
- External knob pad-lockable (suffix "L")



Order Code	Dimensions (mm)			
	ØA	ØB	Min C	D
DPM 28 ...A	7	1/4"	10	21
DPM 38 ...A	10	3/8"	10	21
DPM ... 1..A	14	1/2"	10	21
DPM ... 2..A	R	3/4"	14	21
DPM ... 3..A	R	1"	18	25

(*) Length to be specified

NOTES
The control and signaling units get same temperature class as the housing on which they are mounted.



Order Code	Dimensions (mm)				
	ØA	ØB	ØC	D	E
DPM 28 ...S	7	1/4"	13	21	15
DPM 38 ...S	10	3/8"	18	21	15
DPM ... 1..S	14	1/2"	23	21	20
DPM ... 2..S	R	3/4"	28	21	20
DPM ... 3..S	R	1"	34	25	25

These units shall be installed on enclosure with volume up to 160,6 dm³ for group IIB+H₂ and up to 62,9 dm³ for group IIC.

These units may be mounted on electrical equipment suitable for group I-M2 (firedamp mines) if no component is made of light alloy. The resulting mode of protection will be Ex d I Mb.

Example: DPM 287

Order Coding	Type of control	Bush diameter according to conventional coding	Guide shaft diameter (mm.)
	DPM	28	7

PUSH BUTTON CONTROL UNIT

series
DP - DFP

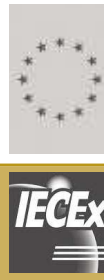
Protection	Gas	1-2	II2G	Ex d IIC or IIB+H ₂ Gb
	Dusts	Zone 21-22	II2D	Ex tb IIIC Db

Grade of Protection	IP 66
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+80°C



Standards and Certificates

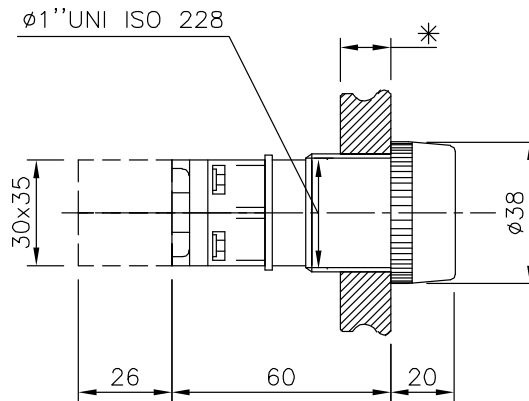
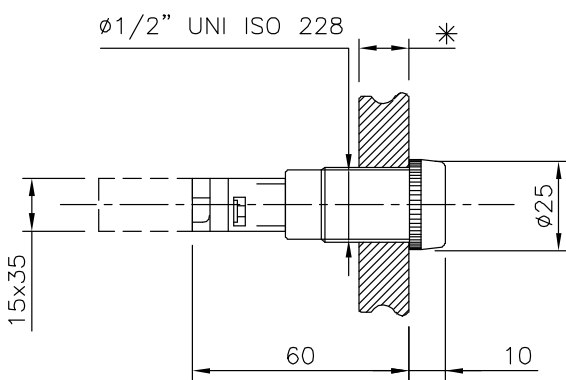


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IEC 60079-0 • IEC 60079-1 • IEC 60079-31	
IECEX INE 14.0023U	

- For COELBO enclosures Series CCA - CCF (see section B)
- The 1/2" Series for its compact size allows to reduce the overall dimensions of the enclosures where they are mounted
- Push button, standard colors: green, yellow, white, blue
- Body in Zinc plated Brass
- Ring nuts in Chrome plated Brass and/or Polycarbonate
- Drive shafts in Stainless Steel

- Options
- Push button color different than black (standard): green, yellow, white or blue.
 - Possibility of having two or more contacts
 - Push button protection in silicon rubber, colors: white, red, black

PUSH BUTTONS



NOTES

The control and signaling units get same temperature class as the housing on which they are mounted.

These units shall be installed on enclosure with volume up to 160,6 dm³ for group IIB+H₂ and up to 62,9 dm³ for group IIC.

These units may be mounted on electrical equipment suitable for group I-M2 (firedamp mines) if no component is made of light alloy. The resulting mode of protection will be Ex d I Mb.

(*) See page B11 for CCA and page B21 for enclosures CCF

Contacts: more information on page C5.

Type	Threading	Contact	Element	Push button	Weight (g)
DP 1	Ø1/2"	NA	Start- ON	Black	115
DFP 1	Ø1"				220
DP 0	Ø1/2"	NC	Stop- OFF	Red	115
DFP 0	Ø1"				220

Example: DP 1V

Order Coding	Type	Element	Push button color (different from std.)	Rubber protection
	DP = unità da 1/2"	0 = Arresto	V = green	.. = none
	DFP = unità da 1"	1 = Marcia	G = yellow	S = yes
			B = white	
			A = blue	

Contact elements: Technical data:

- Nominal current : 10 A
- Nominal Isolation Voltage : 660 V
- Nominal pulse Voltage : 6 kV
- Short circuit protection $U_e < 500 \text{ Vac}$: : Cartridge Fuse 10 A
- Terminals ID : according to GENELEC EN 60947-1
- Screw type joining terminals with captive clamp
- Max wires section: : $2 \times 2,5 \text{ mm}^2$
- Self cleaning contacts : EN01(NC) EN10(NA)
- Working cycles: : 1800 operations / hr (max)

	A.C. (AC15)			D.C. (DC13)		
	24	240	400	24	125	250
Voltage (V)	24	240	400	24	125	250
Current (A)	10	6	4	2.8	0.55	0.27

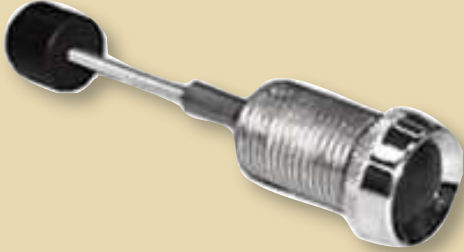
PUSH BUTTON CONTROL UNIT

series
DP - DFP

Protection	Gas	Zone	1-2	II2G	Ex d IIC or IIB+H ₂ Gb
	Dusts	Zone	21-22	II2D	Ex tb IIIC Db

Grade of Protection	IP 66
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Amb. Temp.	Standard	-20°C	+40°C



Standards and Certificates



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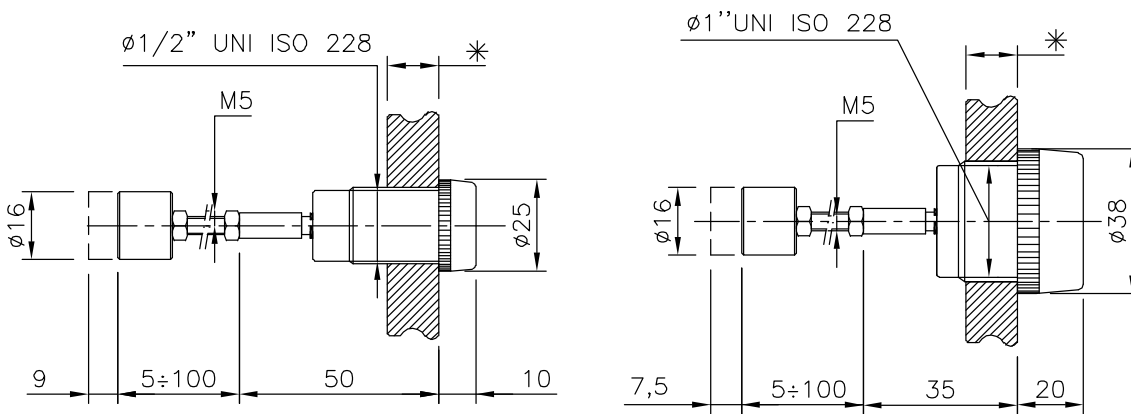
IECEx INE 14.0023U

- For COELBO enclosures series CCA - CCF (see section B)
- Conceived to mechanically operate thermal relays, circuit breakers, etc.
- The Series of 1/2" for its compact size allows to reduce the overall dimensions of the CCA -CCF enclosures
- Body in Zinc plated Brass
- Ring nuts in Chrome plated Brass and/or Polycarbonate
- Drive shafts in Stainless Steel

Options - Push button color different than black (standard): green, yellow, white or blue.

- Push button protection in silicon rubber, colors: white, red, black

RESET PUSH BUTTON



NOTES

The control and signaling units get same temperature class as the housing on which they are mounted.

These units shall be installed on enclosure with volume up to 160,6 dm³ for group IIB+H₂ and up to 62,9 dm³ for group IIC.

These units may be mounted on electrical equipment suitable for group I-M2 (firedamp mines) if no component is made of light alloy.

The resulting mode of protection will be Ex d I Mb.

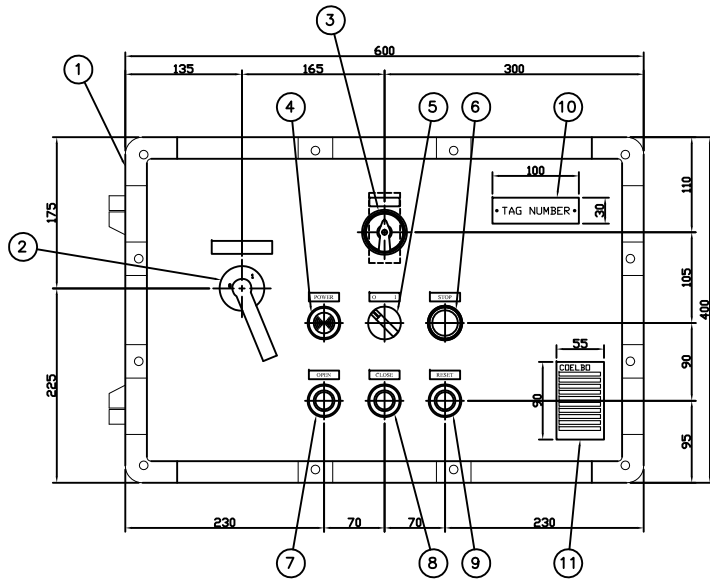
(*) See page B11 for CCA and page B21 for enclosures CCF.

Type	Threading	Push Button	Weight (g)
DP 3	Ø1/2"	Black	110
DFP 3	Ø1"	Black	210

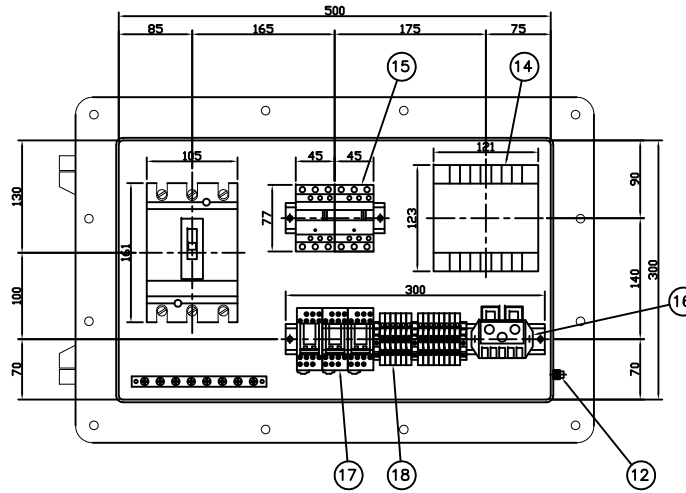
Example: DP 3BS

Order Coding

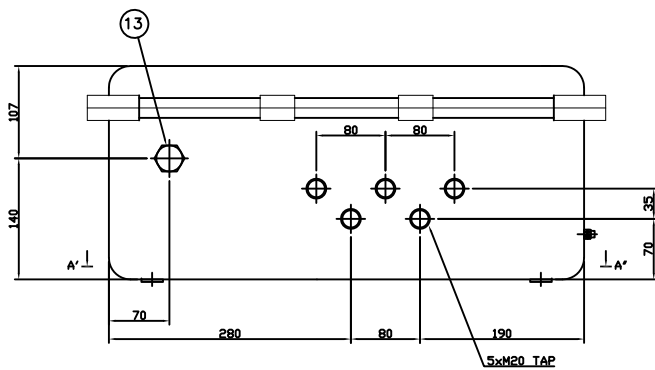
Type	Element	Push button color (different from std.)	Rubber protection
DP = 1/2" units	3 = Reset	V = green	.. = none
DFP = 1" units		G = yellow	S = yes
		B = white	
		A = blue	



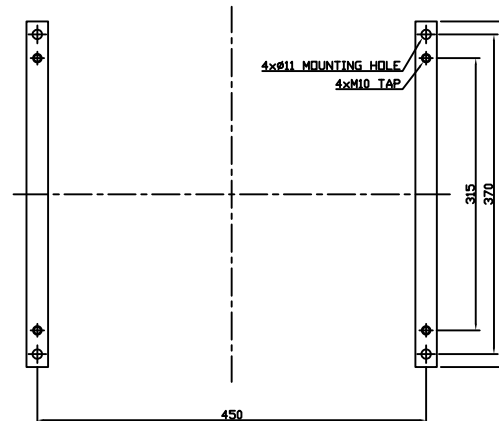
FRONT VIEW



INNER VIEW



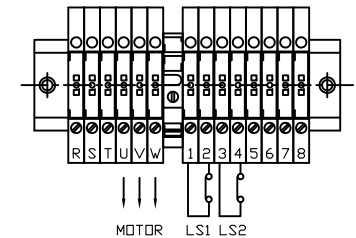
BOTTOM VIEW



MOUNTING DETAIL
A'-A'

NO.	SPECIFICATION	Q'TY	REMARK
1	CCF9/A, Copper free aluminium, 600(W)x400(H)x250(D)	1	
2	Main MCCB, 3p, 16A, 18kA at 440V, NSA 160N	1	
3	Branch MCB, 2pole 10A, 10kA at 230V	1	
4	Indicator lamp, White	1	
5	2Position selector switch with IND+INC contact (16A)	1	
6	Red mushroom button with INC contact	1	
7	Green pushbutton with IND contact	1	
8	Red pushbutton with IND contact	1	
9	Red pushbutton with INC contact	1	
10	Name Plate	1	
11	COELBO Label	1	
12	Internal/External Earth Bolt	1	
13	Breather-Drain Valve, 1/2"	1	
14	Transformer, WY42-300AW, 440/220V, 300VA	1	
15	Magnetic contactor, 3P, 2.2Kw	2	
16	EDCR, 0.3-6A	1	
17	Relay, 4a+4b, OMRON MY4	3	
18	WDU 4sqmm Terminal	14	

TERMINAL BLOCK



DONGYANG
INDUSTRIES ELECTRIC CO.

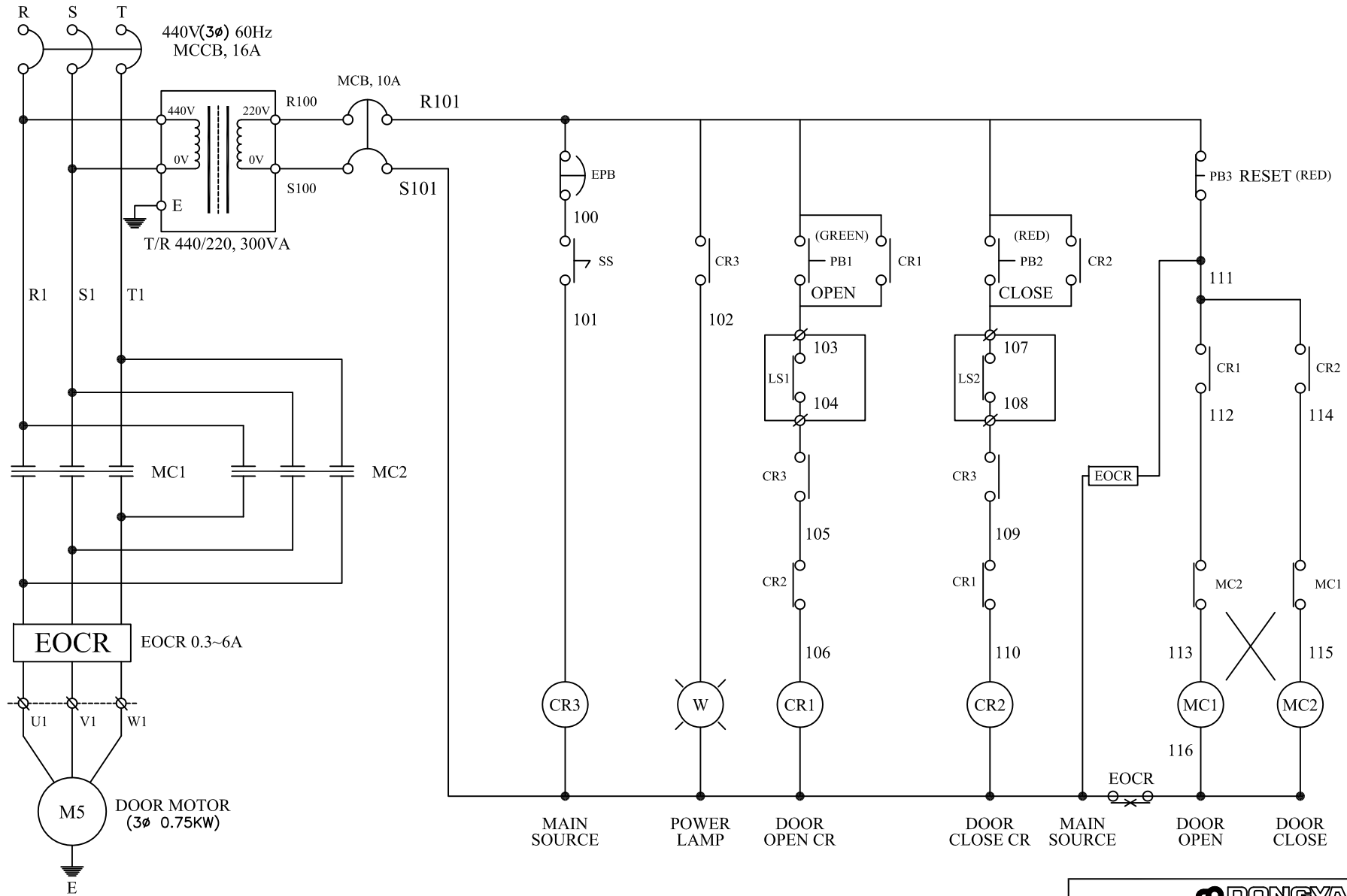
A1

DRAWN BY	CHECKED BY	APPROVAL BY	DATE
B.N.KIM	J.H.BAEK	H.J.KIM	2017. 08. 14

TITLE			
V-DOOR Control panel			
SCALE	DWG. NO.	ZONE NO.	SHEET NO.
1 / 3	SAM170814-002		1 OF 2

0	2010 02.03	FOR APPROVAL	BNK	JHB	HJK
MK.	DATE	REVISIONS	DR.	CH.	APPR.

SCHEMATIC DIAGRAM



DONGYANG
INDUSTRIES ELECTRIC CO.

DRAWN BY	CHECKED BY	APPROVAL BY	DATE
B.N.KIM	J.H.BAEK	H.J.KIM	2017. 08. 14
TITLE			
V-DOOR Control panel			
SCALE	DWG. NO.	ZONE NO.	SHEET NO.
1 / 3	SAM170814-003		2 OF 2

0	2010 02.03	FOR APPROVAL	BNK	JHB	HJK
NO.	DATE	REVISIONS	DR.	CH.	APPR.