



UH-UP series operators

• Use

The UH-UP operators are normally used in the chemical and petrochemical plants, off-shore platforms, refineries and any other industry where hazardous atmospheres (gas and combustible dust) are potentially present. The UH-UP operators range has been designed to meet the main requirements of power distribution, monitoring and signalling, and other electrical functions inside the hazardous area of the plant.

• Function

The UH-UP operators are normally installed on EJB, GUB, GUBA and CSD enclosures series used for the following main applications:

- control station and instrument housing
 - motor starter unit
 - electronic grounding system
 - lighting control panel
- and fitted with other electrical and/or electronic equipment as per our client specific requirements.

• Construction

The material used to manufacture the UH-UP operators series have been studied to grant the maximum protection against the highly corrosive agents present in these industries:

- bushing and shaft, as components directly involved into the explosion proof protection, are made in stainless steel AISI 316. The external body can be in copper free aluminium or stainless steel
- external handles and internal leverages activating switches and breakers up to 1000 Amp. are made in stainless steel AISI 316
- external handles padlockable (two padlocks) in different position (on request)
- internal gasket in silicone
- external push button units and pilot light diffusers are made with antistatic and UV-protected polymers
- external push button units have passed a mechanical endurance test of 15 million operation cycles (standard), 1 million (selector) and 300 thousands (emergency)
- contact blocks base is equipped with one to six contacts (NO, NC, NO+NC)
- diffuser with special design to grant an high visibility degree in any situation
- pilot light window in thermoresistant glass sealed with auto-leveling silicone
- integrated labels in polycarbonate, aluminium and stainless steel with possibility to customize the marking as per client specifications



The new handles have a compact design with an integrated label granting the precise indication of the position of the switch in any moment.

The handle can be equipped with two padlocks so to increase the level of security by unauthorized operations.

• Protection

certificate number:	IMQ 11 ATEX 029 U
marking:	Ex II 2GD Ex d IIC Gb T6 Ex tb IIC T85°C Db
ambient temperature:	-60°C +60°C
degree of protection:	IP66
conformity:	Directive ATEX 94/9/EC
standards:	EN60079-0 / EN60079-1 / EN60079-31 / EN60529
category:	suitable for Zone 1 – 21 (gas) and Zone 2 – 22 (dust)

UHB - UHBP

Handle unit for MCB up to 60 Amp. complete with integrated label with ON - OFF indicators.

UHBP model is provided with a padlockable system in OFF position, to increase the level of security by unauthorized operators. The handle can be equipped with two padlocks.
Electrical components not included.

Code	Colour	Padlock
UHB		-
UHBP		2



UHLB - UHLBP

Handle unit for MCCB up to 1.000 Amp. complete with integrated label with ON - OFF indicators.

UHLBP model is provided with a padlockable system in OFF position, to increase the level of security by unauthorized operations. The handle can be equipped with two padlocks.
Electrical components not included.

Code	Colour	Padlock
UHLB		-
UHLBP		2



UHS - UHSP

Handle unit for rotary switch up to 60 Amp. complete with integrated label with different indications as per program.

UHSP model is provided with a padlockable system in OFF position, to increase the level of security by unauthorized operations. The handle can be equipped with two padlocks.
Electrical components not included.

Code	Colour	Padlock
UHS		-
UHSP		2



UHS1

Handle unit for rotary switch up to 16 Amp. complete with integrated label with different indications as per program.

Electrical components not included.

Code	Colour	Padlock
UHS 1		-





Code	Colour	Contact
UPB R2		NC
UPB W1		NO
UPB G1		NO
UPB X1		NO
UPB Y1		NO
UPB B1		NO

Code	Colour	Contact
UPBE R2		NC
UPBE W1		NO
UPBE G1		NO
UPBE X1		NO
UPBE Y1		NO
UPBE B1		NO

Code	Colour	Contact
UPBS R2		NC
UPBS W1		NO
UPBS G1		NO
UPBS X1		NO
UPBS Y1		NO
UPBS B1		NO

Code	Colour	Contact
UPBK 1		NO
UPBK 2		NC

UPB

Spring-return (stay-put on request) flush pushbutton unit.

Bushing Ø M32.

Supplied complete with one electrical contact as listed and, as option, with different combinations of contacts NO and NC for a maximum number of six units (see table 1).

Available in different colours as per side table and, as option, engraved with electrical symbols (see table 2 - 3).

UPBE

Spring-return (stay-put on request) extended pushbutton unit.

Bushing Ø M32.

Supplied complete with one electrical contact as listed and, as option, with different combinations of contacts NO and NC for a maximum number of six units (see table 1).

Available in different colours as per side table and, as option, engraved with electrical symbols (see table 2 - 3).

UPBS

Stay-put (spring-return on request) selector unit.

Bushing Ø M32.

Supplied complete with one electrical contact as listed and, as option, with different combinations of contacts NO and NC for a maximum number of six units (see table 1).

Available in different colours as per side table.

UPBK

Stay-put key selector unit.

Bushing Ø M32.

Supplied complete with one electrical contact as listed and, as option, with different combinations of contacts NO and NC for a maximum number of six units (see table 1).

UPBM

Spring-return mushroom pushbutton unit. Bushing Ø M32.

Supplied complete with one electrical contact as listed and, as option, with different combinations of contacts NO and NC for a maximum number of six units (see table 1).

Available in different colours as per side table and, as option, engraved with electrical symbols (see table 2 - 3).

Code	Colour	Contact
UPBM R2	●	NC
UPBM W1	●	NO
UPBM G1	●	NO
UPBM X1	●	NO
UPBM Y1	●	NO
UPBM B1	●	NO



UPBEP - UPBEPW

Push-pull emergency pushbutton unit. Bushing Ø M32. Supplied complete with one electrical contact as listed and, as option, with different combinations of contacts NO and NC for a maximum number of six units (see table 1). Available in different colours as per side table and as option, engraved with electrical symbols (see table 2-3).

Code	Colour	Contact
UPBEP R2	●	NC
UPBEP R1	●	NO
UPBEPW R2	●	NC
UPBEPWR1	●	NO



UPBER - UPBRW

Turn to release emergency pushbutton unit. Bushing Ø M32.

Supplied complete with one electrical contact as listed and, as option, with different combinations of contact NO and NC for a maximum number of six units (see table 1). UPBERW model is provided with two top windows showing the working status: green = non actuated, red = actuated.

Code	Colour	Contact
UPBER R2	●	NC
UPBER R1	●	NO
UPBERW R2	●	NC
UPBERWR1	●	NO



UPBEK

Key to release emergency pushbutton unit. Bushing Ø M32.

Supplied complete with one electrical contact as listed and, as option, with different combinations of contacts, NO and NC for a maximum number of six units (see table 1).

Code	Colour	Contact
UPBEK R2	●	NC
UPBEK R1	●	NO





Code	Colour	Contact
UPL R		LED
UPL W		LED
UPL G		LED
UPL O		LED
UPL Y		LED
UPL B		LED

Code	Colour	Contact
UPBD A12		NO - NC
UPBD B12		NO - NC
UPBD C12		NO - NC
UPBD D12		NO - NC
UPBD E12		NO - NC
UPBD F12		NO - NC

Code	Colour	Contact
UPBSD R22		NC - NC
UPBSD W11		NO - NO
UPBSD G11		NO - NO
UPBSD X11		NO - NO
UPBSD Y11		NO - NO
UPBSD B11		NO - NO

Code	Colour	Contact
UPBKD 11		NO - NO
UPBKD 22		NC - NC

UPL A - UPL S

LED pilot light unit. Bushing Ø M32. Supplied complete with LED unit in different voltage as per electrical circuit requirements.

Available in different colours as per side table and, as option, engraved with electrical symbols (see table 2 - 3).

UPBD

Spring-return double pushbutton unit. Bushing Ø M32.

Supplied complete with two electrical contact as listed and, as option, with different combinations of contacts NO and NC for a maximum number of four units (see table 1).

Available in different colours, with or without electrical symbols, as side listed.

UPBSD

Stay-put (spring-return on request) selector unit. Bushing Ø M32.

Supplied complete with two electrical contacts as listed and, as option, with different combinations of contacts NO and NC for a maximum number of four units (see table 1).

Available in different colours as side listed.

UPBKD

Stay-put key selector unit. Bushing Ø M32.

Supplied complete with two electrical contacts as listed and, as option, with different combinations of contacts NO and NC for a maximum number of four units (see table 1).

UPB contacts

The contacts standardized by Supermec for its own range of operators are manufactured by a leading electrical company, so to allow the maximum reliability and functionality of the product.

These contacts are normally available worldwide so to grant the possibility to the client to solve easily any problem of maintenance and/or extension of the functions.

Table 1

Code		Contact	
product	structure	unit	function
UPB C1	1	single	NO
UPB C2	2	single	NC
UPB C3	3	double	NO + NO
UPB C4	4	double	NO + NC
UPB C5	5	double	NO + NC

UPB - UPL colours

To grant the possibility to the client to solve easily any problem of maintenance and/or modification of the functions, the coloured push button caps and pilot light lens are easily removable, without the risk to reduce the explosion proof protection. This operation has to be handled by responsible working staff so to assure the reinstatement of the electrical and visual functionality of the control modified, the coloured caps and lens are available in different colours and can be engraved with electrical symbols as per attached tables.

Table 2 - Caps

Code		Contact	
product	structure	name	symbol
UPB CR	R	RED	
UPB CW	W	WHITE	
UPB CG	G	GREEN	
UPB CX	X	BLACK	
UPB CY	Y	YELLOW	
UPB CB	B	BLUE	

Table 2 - Lens

Code		Contact	
product	structure	name	symbol
UPL LR	R	RED	
UPL LW	W	WHITE	
UPL LG	G	GREEN	
UPL LO	O	ORANGE	
UPL LY	Y	YELLOW	
UPL LB	B	BLUE	

Table 3 - Additional to Caps and Lens codes

Code		Contact		Code		Contact	
product	structure	name	symbol	product	structure	name	symbol
-	S0	OFF		-	S1	ON	
-	S2	PLUS	+	-	S3	MINUS	-
-	S4	LEFT		-	S5	RIGHT	
-	S6	UP		-	S7	DOWN	
-	S8	LIGHT		-	S9	BELL	