



PROVIDE SAFETY  
FOR THE ELECTRICAL SYSTEM

# SWITCHES DISCONNECTORS

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A team of professionals with high experience and ability to solve all your queries





# iHATHOR SAFETY SWITCHES



Examples



**Provide Safety  
to your Property  
and your Personnel**

iHATHOR is a full line of safety and isolation switches of indoor and outdoor applications (made in stainless steel AISI 304L).

We design and manufacture every product ourselves in our own factories. Focused heavily on safety, iHATHOR's switching device product line brings state-of-the-art designs that can even be customized to fit your unique needs. iHATHOR switch disconnectors on-load, are available from 20A to 1800A, a large range for solving the different necessity of market.

Achieving an optimal design for facility it's installation and operation. Key on hand.



**FOR MORE INFORMATION CLICK HERE**





# iHATHOR SAFETY SWITCHES

## APPLICATIONS

iHATHOR switch with the electrical with safe in solar and wind renewable energy, offshore, maritime, power distribution, food industry, manufacturing machinery and other general industries.

iHATHOR safety switches are reliable and provide safety to your property and your personnel in addition to providing:

- Protection against overcurrent.
- Protection against circuit overloads.
- Protection against short circuiting.
- Protection against heat-generated damage.

Safety switches are designed to interrupt the power in the event of a single fault in the circuit. Custom solutions projects for small and large series. iHATHOR is certified UL, Nema 4x.

## ADVANTAGES

- Ready for installation
- Compact design.
- Possibilities in custom housing design.
- Versatility.
- Fast delivery time.
- Custom designs available.
- Quantity discount.



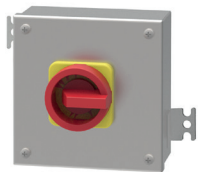
## NORMATIVE

- IEC/EN 60947-3
- IP66 Norm IEC EN 62208 and EN 60529.
- Maximum IK10 resistance Norm IEC62208 and IEC 62262.
- UE Directive of low voltage 2014/35/UE.
- Materials intended to come into contact with food, CE 1935/2004.
- Offshore, maritime grade IP66.
- UL Standard(s) Safety: UL508A- Industrial Control Panels, CSA C22.2 No.14- Industrial Control Equipment.

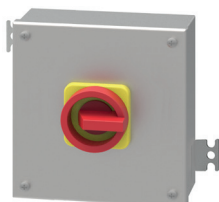
## OPTIONS

- The most standard products are presented, options are available upon request.
- Option multiple of switch, n° of poles, current, aux. contacts,...
- Drills in base your needs.
- Option of different supports.
- Option of manufactured in different materials: stainless steel AISI 316L (enclosure maritime grade) or painted galvanized steel finish in RAL 7035 or another color.
- Design on IP67 or IP68 box.
- Possibility of Atex load switch.

# iHATHOR SWITCH DISCONNECTOR BKP SERIES



Example 20A - 25A - 40A



Example 63A - 80A



Example 100A - 125A

**Available in a Wide Range  
of Currents from 20A Up 125A**

iHATHOR switch disconnectors available in a wide range of currents from 20A up 125A. BKP Series has been designed according to standard IEC/EN60947-3 for its use in low voltage civil and industrial installations and are certificated to UL 508 for use as manual motor controllers.



**FOR MORE INFORMATION CLICK HERE**

## TECHNICAL INFORMATION

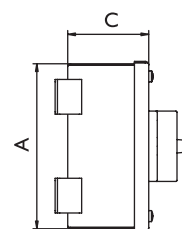
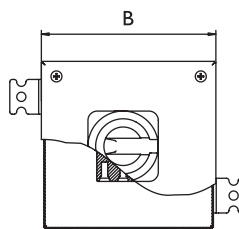
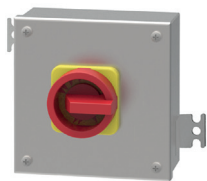
### iHATHOR SWITCH DISCONNECTORS - BKP SERIES

ACCORDING TO VDE 0660, IEC/EN 60947-3, IEC/EN 60947-5-1				20	25	40	63	80	125
Rated thermal current	I <sub>th</sub>	A		20	25	40	63	80	125
Rated thermal current enclosed	I <sub>the</sub>	A		20	25	40	63	80	110
Rated insulation voltage	U <sub>i</sub>	V		690	690	690	690	690	1000
Rated impulse withstands voltage	U <sub>imp</sub>	kV		6	6	6	6	6	8
Rated operational current AC	I <sub>e</sub>	AC21A	A	20	25	40	63	80	125
Making capacity	I <sub>eff</sub>	3x380-440V	A	160	190	300	370	440	850
Breaking capacity		3x220-240V	A	160	180	250	330	380	680
Breaking capacity		3x380-440V	A	160	180	250	330	380	680
Breaking capacity		3x660-690V	A	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	A	12	16	30	37	37	72
Direct switching motors	AC3	3x220-240V	kW	3	4	7,5	11	11	22
Direct switching motors		3x380-440V	kW	5,5	7,5	15	18,5	18,5	37
Direct switching motors		3x660-690V	kW	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	A	16	20	32	45	45	85
Main & safety switch	AC23A	3x220-240V	kW	4	5,5	9	15	15	30
Main & safety switch	AC23B	3x380-440V	kW	7,5	10	16	22	22	45
Main & safety switch		3x660-690V	kW	5,5	7,5	15	18,5	18,5	37
Rated conditional short-circuit current		kA <sub>eff</sub>		10	10	10	10	10	10
Max. fuse size	gL (gG)	A		25	35	50	63	80	125
Rated short-time withstand current I.s.	I <sub>cw</sub>	A		250	300	500	600	850	1500
Mechanical life		x10 <sup>3</sup>		200	200	200	100	100	100
CONNECTING CAPACITY									
Solid or stranded cable		mm <sup>2</sup>		0,5-10		1-25		4-50	
Solid or stranded cable		AWG		20-8		16-4		10-0 (10)	
Flexible cable		mm <sup>2</sup>		0,5-6		4-16		10-35	
Flexible cable		AWG		20-10		16-6		8-2	
Size of terminal screw				M3,5		M5		M6	
Tightening torque		Nm		0,8-1,7		2-4		3,5-4,5	

# iHATHOR SWITCH DISCONNECTOR BKP SERIES

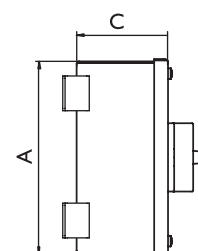
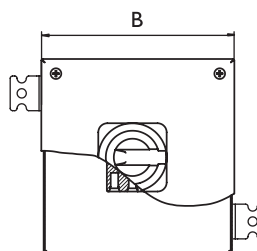
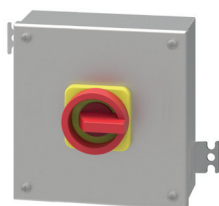
## PLANS AND REFERENCES

### BKP SERIES | 20A-25A-40A



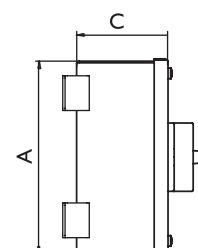
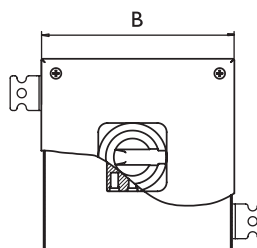
BKP SERIES (20A - 25A - 40A)		DIMENSIONS (mm)			
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP20A3P	160	160	90	20	3
BKP20A4P	160	160	90	20	4
BKP25A3P	160	160	90	25	3
BKP25A4P	160	160	90	25	4
BKP40A3P	160	160	90	40	3
BKP40A4P	160	160	90	40	4

### BKP SERIES | 63A-80A



BKP SERIES (63A - 80A)		DIMENSIONS (mm)			
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP63A3P	200	200	120	63	3
BKP63A4P	200	200	120	63	4
BKP80A3P	200	200	120	80	3
BKP80A4P	200	200	120	80	4

### BKP SERIES | 100A-125A



BKP SERIES (100A - 125A)		DIMENSIONS (mm)			
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP100A3P	200	200	120	100	3
BKP100A4P	200	200	120	100	4
BKP125A3P	200	200	120	125	3
BKP125A4P	200	200	120	125	4



# iHATHOR SWITCH DISCONNECTOR H0 SERIES



Example

**Rated Breaking Current  
of Up to 8 Times  
the Rated Operational Current**

Switch disconnectors on-load H0 Series, are available from 125A for 250A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA. Uninterrupted duties in extreme tropic and polar conditions, as well as the polluted environment of any industrial process.



**FOR MORE INFORMATION CLICK HERE**



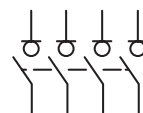
## TECHNICAL INFORMATION

iHATHOR SWITCH DISCONNECTORS - H0 SERIES					125	160	200	250
ACCORDING TO IEC/EN 60947-3								
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A		125	160	200	250
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A		125	160	200	250
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A		125	160	200	250
Rated insulation voltage	U <sub>i</sub>		V		1000	1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV		8	8	8	8
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	125	160	200	250
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	125	160	200	250 <sup>*(3)</sup>
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	125	160	160	160
Rated breaking capacity		400V	AC23	A	1000	1280	1280	1280
Rated making capacity		400V	AC23	A	1250	1600	1600	1600
SHORT - CIRCUIT BEHAVIOUR					125	160	200	250
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)		13	13	13	13
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms		7	7	7	7
MECHANICAL FEATURES					125	160	200	250
Number of mechanical operations (according to the standars, for other values please consult)			Cycles		8000	8000	8000	8000
Maximum weight 3P			Kg		0,85	0,85	0,9	0,9
Maximum weight 3P + N			Kg		1	1	1	1

<sup>\*(1)</sup> Rated operational frequency 50/60Hz. Other voltages or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

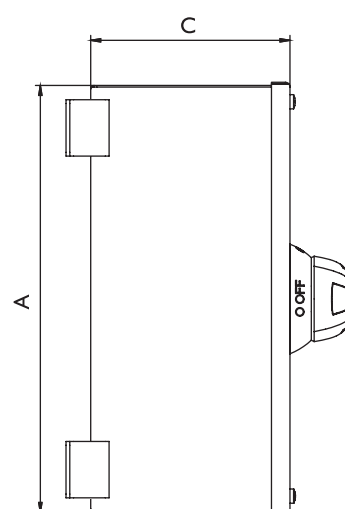
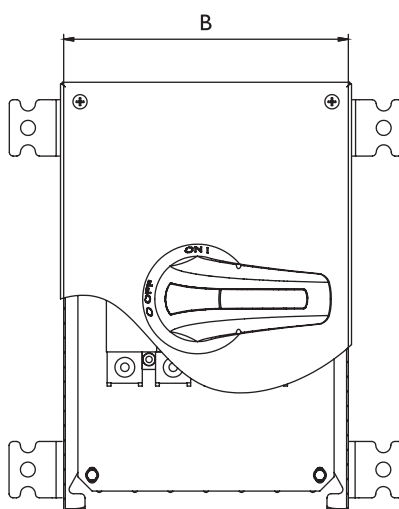
<sup>\*(3)</sup> Intensidad de empleo AC22B.



**4P**  
Also available 4P switch -  
disconnectors under request

# iHATHOR SWITCH DISCONNECTOR H0 SERIES

## PLANS AND REFERENCES



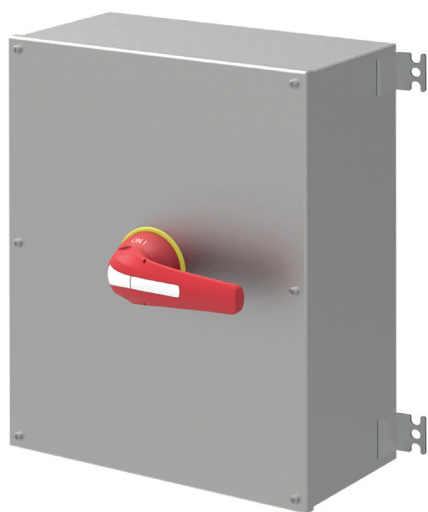
H0 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H125A3PP	300	200	150	125A	3
H160A3PP	300	200	150	160A	3
H125A4PP	300	200	150	125A	4
H160A4PP	300	200	150	160A	4
H125A3PB	300	200	150	125A	3
H160A3PB	300	200	150	160A	3
H200A3PB	300	200	150	200A	3
H125A4PB	300	200	150	125A	4
H160A4PB	300	200	150	160A	4
H200A4PB	300	200	150	200A	4
H200A3PP	400	300	150	200A	3
H250A3PP	400	300	150	250A	3
H200A4PP	400	300	150	200A	4
H250A4PP	400	300	150	250A	4

PP: strip connection

PB: flange connection



# iHATHOR SWITCH DISCONNECTOR HI SERIES



Example

**Rated Breaking Current  
of Up to 8 Times  
the Rated Operational Current**

Switch disconnectors on-load HI Series, are available from 315A for 400A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA. Uninterrupted duties in extreme tropic and polar conditions, as well as the polluted environment of any industrial process.



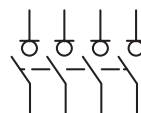
**FOR MORE INFORMATION CLICK HERE**

## TECHNICAL INFORMATION

iHATHOR SWITCH DISCONNECTORS - HI SERIES					
ACCORDING TO IEC/EN 60947-3				315	400
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A	315	400
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A	315	400
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A	315	400
Rated insulation voltage	U <sub>i</sub>		V	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV	8	8
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	315
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	315
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	315
Rated breaking capacity		400V	AC23	A	2520
Rated making capacity		400V	AC23	A	3150
SHORT - CIRCUIT BEHAVIOUR				315	400
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (peak)	20	20
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms	12	12
MECHANICAL FEATURES				315	400
Number of mechanical operations (according to the standards, for other values please consult)			Cycles	8000	5000
Maximum weight 3P			Kg	1,7	1,9
Maximum weight 3P + N			Kg	1,9	2,1

<sup>\*(1)</sup> Rated operational frequency 50/60Hz. Other voltages or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)



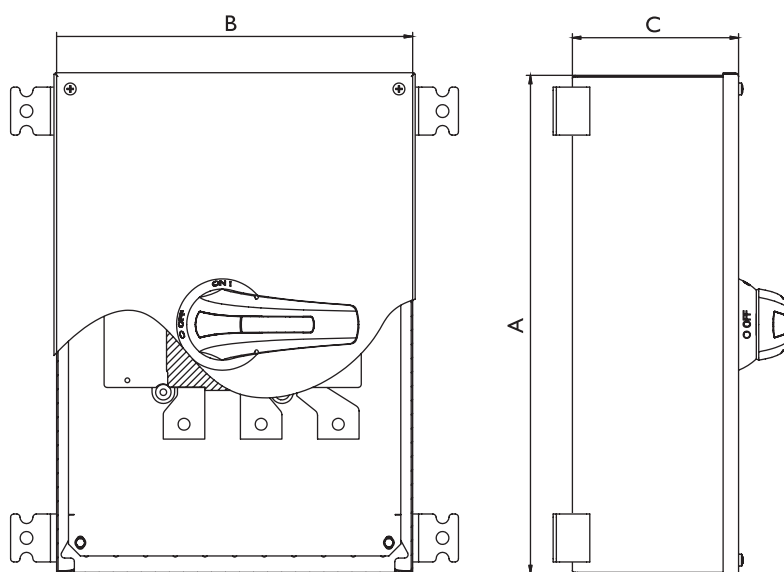
**4P**

Also available 4P switch - disconnectors under request



# iHATHOR SWITCH DISCONNECTOR HI SERIES

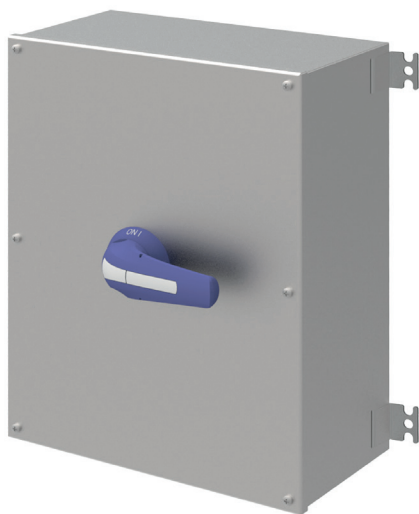
## PLANS AND REFERENCES



HI SERIES		DIMENSIONS (mm)			
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H315A3PP	400	300	150	315A	3
H315A4PP	400	300	150	315A	4
H400A3PP	500	400	200	400A	3
H400A4PP	500	400	200	400A	4



# iHATHOR SWITCH DISCONNECTOR H2 SERIES



Example

**Rated Breaking Current  
of Up to 8 Times  
the Rated Operational Current**

Switch disconnectors on-load H2 Series, are available from 500A for 800A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA. Uninterrupted duties in extreme tropic and polar conditions, as well as the polluted environment of any industrial process.



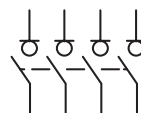
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## TECHNICAL INFORMATION

iHATHOR SWITCH DISCONNECTORS - H2 SERIES					500	630	800
ACCORDING TO IEC/EN 60947-3							
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A		500	630	800
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A		500	630	720
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A		500	630	640
Rated insulation voltage	U <sub>i</sub>		V		1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV		12	12	12
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	500	630	800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	500	630	800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	500	630	800
Rated breaking capacity		400V	AC23	A	4000	5000	6400
Rated making capacity		400V	AC23	A	5000	6300	8000
SHORT - CIRCUIT BEHAVIOUR					500	630	800
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)		26	26	26
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms		16	16	16
MECHANICAL FEATURES					500	630	800
Number of mechanical operations (according to the standards, for other values please consult)			Cycles		5000	5000	3000
Maximum weight 3P			Kg		4,2	4,2	4,2
Maximum weight 3P + N			Kg		4,5	4,5	4,5

<sup>\*(1)</sup> Rated operational frequency 50/60Hz. Other voltages or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

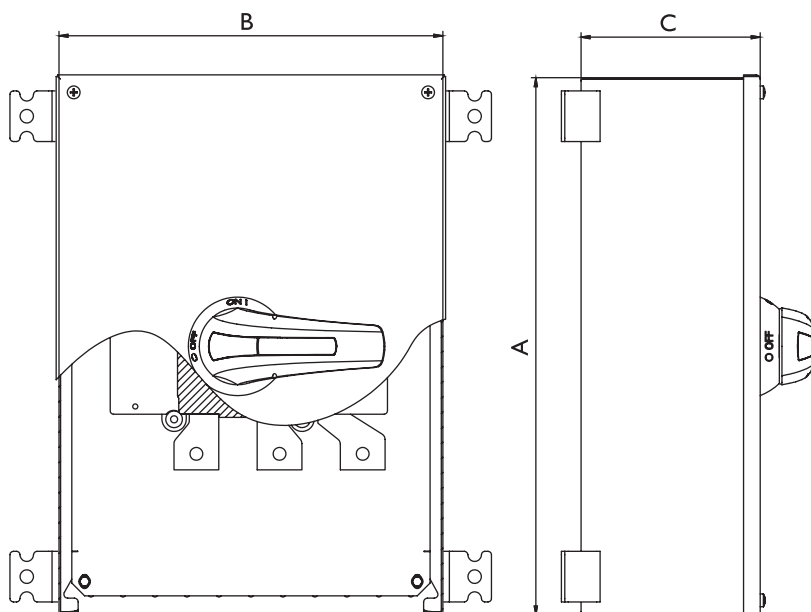
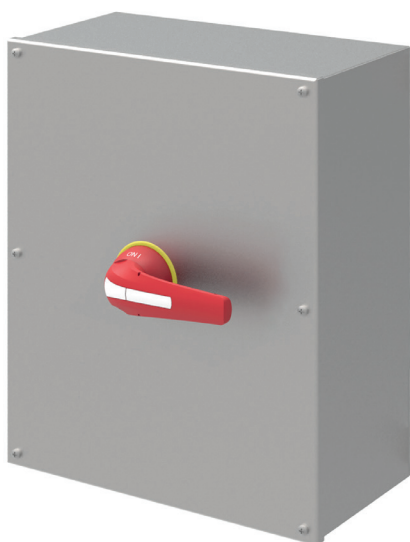


**4P**

Also available 4P switch - disconnectors under request

# iHATHOR SWITCH DISCONNECTOR H2 SERIES

## PLANS AND REFERENCES

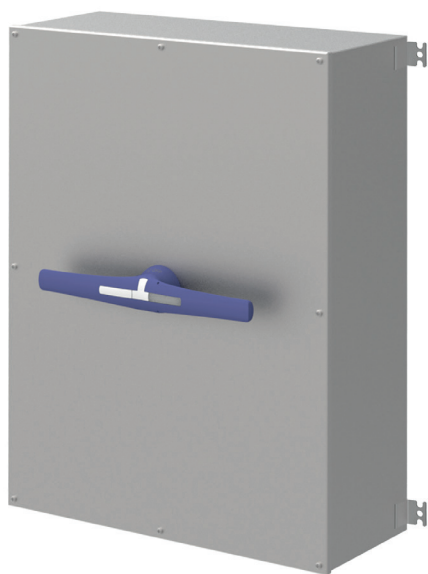


H2 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H500A3PP	500	400	200	500A	3
H500A4PP	500	400	200	500A	4
H630A3PP	500	400	200	630A	3
H630A4PP	500	400	200	630A	4
H800A3PP	500	400	200	800A	3
H800A4PP	500	400	200	800A	4





# iHATHOR SWITCH DISCONNECTOR H3 SERIES



Example

**Rated Breaking Current  
of Up to 8 Times  
the Rated Operational Current**

Switch disconnectors on-load H3 Series, are available from 1000A for 1800A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA. Uninterrupted duties in extreme tropic and polar conditions, as well as the polluted environment of any industrial process.



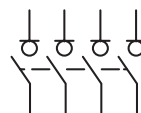
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## TECHNICAL INFORMATION

iHATHOR SWITCH DISCONNECTORS - H3 SERIES					1000	1250	1600	1800
ACCORDING TO IEC/EN 60947-3								
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A		1000	1250	1600	1800
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A		1000	1250	1600	1800
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A		1000	1250	1600	1600
Rated insulation voltage	U <sub>i</sub>		V		1000	1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV		12	12	12	12
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	1000	1250	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	1000	1250	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	-	-	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 800V	AC21B	A	-	-	-	1250
Rated breaking capacity		400V	AC23	A	3000	3750	4800	5400
Rated making capacity		400V	AC23	A	3000	3750	4800	5400
SHORT - CIRCUIT BEHAVIOUR					1000	1250	1600	1800
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (peak)		60	60	75	75
Rated short-time withstand current 1 s.	I <sub>cw</sub>		kA rms		25	25	50	50
MECHANICAL FEATURES					1000	1250	1600	1800
Number of mechanical operations (according to the standards, for other values please consult)			Cycles		3000	3000	3000	3000
Maximum weight 3P			Kg		18,5	18,5	18,5	18,5
Maximum weight 3P + N			Kg		20,8	20,8	20,8	20,8

<sup>\*(1)</sup> Rated operational frequency 50/60Hz. Other voltages or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

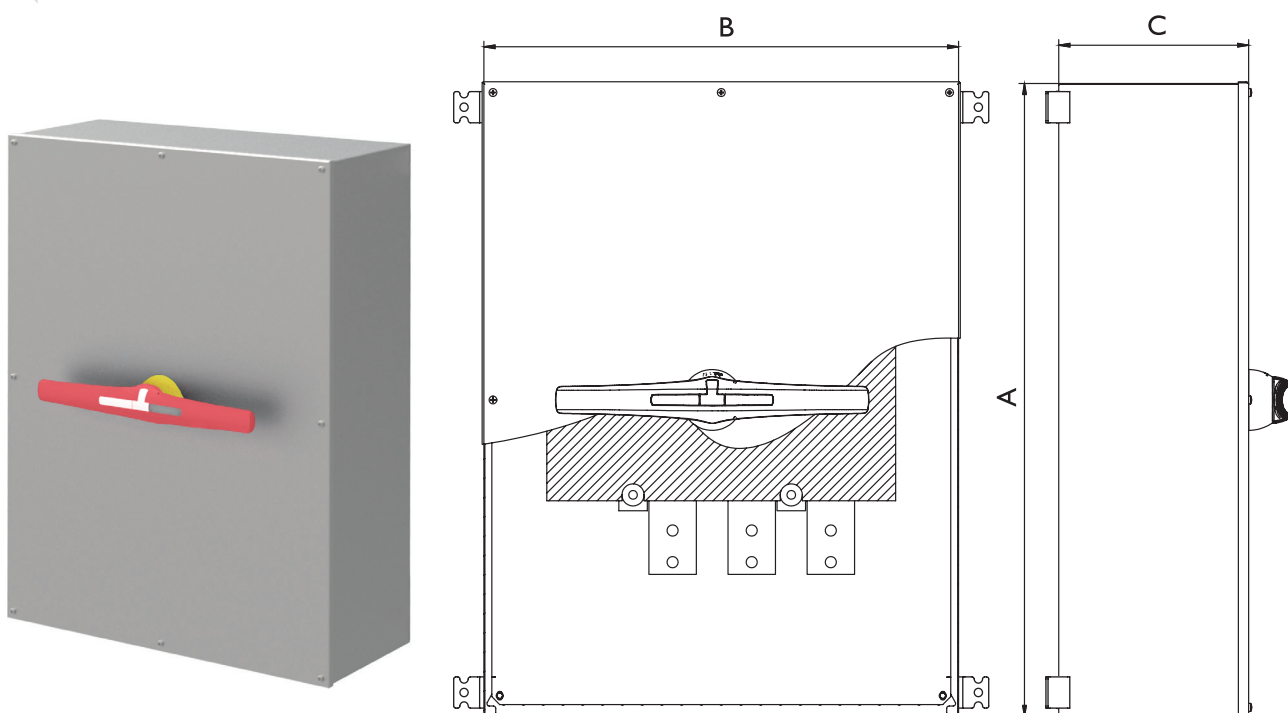


**4P**

Also available 4P switch -  
disconnectors under request

# iHATHOR SWITCH DISCONNECTOR H3 SERIES

## PLANS AND REFERENCES



H3 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H1000A3PP	600	500	200	1000A	3
H1000A4PP	600	500	200	1000A	4
H1250A3PP	600	500	200	1250A	3
H1250A4PP	600	500	200	1250A	4
H1600A3PP	800	600	250	1600A	3
H1600A4PP	800	600	250	1600A	4
H1800A3PP	800	600	250	1800A	3
H1800A4PP	800	600	250	1800A	4



# iHATHOR ATEX ENCLOSED SAFETY SWITCHES



Examples



**Provide Safety  
to your Property  
and your Personnel  
in Hazardous Areas**

The Atex & IECEx enclosed safety and isolation switch, iHATHOR Series allows work with a machine to safely maintain, clean and overhaul it as long as the switch is in the OFF position.

This kind of switch is commonly used in any industry which uses machines, because the electrical circuits and tri-phase asynchronous motors need the energy supply and the installation kept separate, in places considered as potentially explosive, such as zones I, 2, 21 and 22.



**FOR MORE INFORMATION CLICK HERE**





# iHATHOR EX ENCLOSED SAFETY SWITCH ATEX & IECEx SERIES

## Robust and Easy to Install



Example 25A with standard selector



Example 180A with emergency selector

➔ [FOR MORE INFORMATION CLICK HERE](#)

Atex e IECEx enclosed isolation switch with lid secured quickly by quarter turn of captive screw, available in currents 25A, 40A, 80A and 180A. Allows work with a machine to safely maintain, clean and overhaul it as long as the switch is in the OFF position. It's made up of two components:

It's made up of two components:

- The control component is a selector, which allows the current to go through the circuit or not. The ON position (I) allows the current, so blocks access to the machine through the mechanical blocker. The OFF position (0) blocks the current, to allow any work on the machine to be carried out.
- The isolation module allows the current to go through the circuit when the selector is in the ON position, and keep the current when the selector is in the OFF one.

This kind of switch is commonly used in any industry which uses machines, because the electrical circuits and tri-phase asynchronous motors need the energy supply and the installation kept separate in places considered as potentially explosive, such as zones I, 2, 21 and 22.

The switch is protected by a stainless steel AISI 316L enclosure, specifically designed, waterproof, antirust and with IP66 protection degree. It has a protection "Ex e" and "Ex d", which allows use in zones with a high explosion risk.

## ADVANTAGES

- It is impossible to start the machine when working on it thanks to the mechanical blocking of the disconnecter.
- It gives a total block.
- It's a necessary device in order to carry out maintaining, cleaning or overhauling.
- Enclosure is made in AISI 316L stainless steel for marine or highly corrosive places.

# iHATHOR EX ENCLOSED SAFETY SWITCH ATEX & IECEx SERIES

## FEATURES

The Ex switch rated current is between 25 and 180A.

It can work between two temperature ranges, which give it a higher use capacity.

- $-20^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$
- $-20^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

The Ex enclosure has:

- The joint between the cover and body, is designed to secure an IP66 degree protection.
- The selector has an IP65 degree protection.
- It's designed with stainless steel AISI 304L.
- It includes two cable glands with "Ex e" protection in either M25 nickel plated brass or in stainless steel.
- It has four wall brackets.
- It has "Ex e" and "Ex d" protection, for use it in zones 1, 2, 21 and 22 with explosive atmospheres with dust and gas.



## PROTECTION MODE

This equipment is certified for use in potentially explosive atmospheres in 1, 2, 21 and 22 zones and it has "Ex e" and "Ex d" (protection).

Atex mark:

- II2G Ex d e IICT6/T5 Gb
- II2D Ex tb IIIC T85°C / T100°C Db
- Certificate number: LOM14ATEX2082

IECEx mark:

- IECEx LOM 18.0001X
- Ex d e IICT6/T5 Gb
- Ex tb IIIC T85°C/T100°C Db

## OPTIONS

- There are two kinds of Ex selector; one normal and the other an emergency selector; in red and yellow.
- Choice of poles between 3 poles, 3 poles + neutral, 4 poles and 6 poles.
- Possibility of including auxiliary contacts.
- Enclosure is made in AISI 316L stainless steel for marine or highly corrosive places.
- Ex cable glands available in any size and thread.

## NORMATIVE

Atex directive and regulation:

- Atex directive 2014/34/EU
- EN 60079-0:2012
- EN 60079-1:2007
- EN 60079-7:2015
- EN 60079-31:2010

IECEx regulation:

- IEC 60079-0:2011
- IEC 60079-1:2006
- IEC 60079-7:2015
- IEC 60079-31:2013

Enclosure regulation:

- IP regulation (IP65): IEC 60529
- IK regulation (IK10): IEC 62262

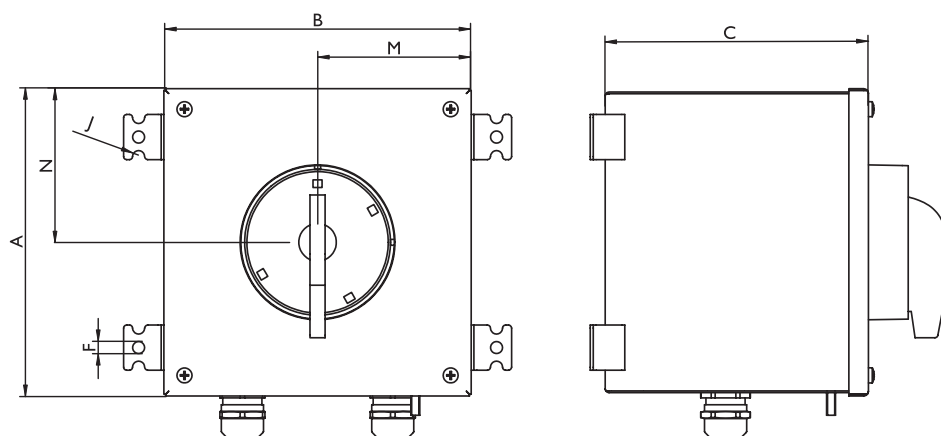
Low voltage directive and regulation:

- Directive 2014/35/EU
- EN 61439-1:2011
- EN 61439-2:2011

# iHATHOR EX ENCLOSED SAFETY SWITCH ATEX & IECEX SERIES

## BLUEPRINT AND DIMENSIONS

The planes are the same for all models, even if the measurements change.



**10**  
YEARS

**GUARANTEE**  
FOR STAINLESS  
ANTICORROSIVE

**5**  
YEARS

**GUARANTEE**  
FOR MECHANICAL  
PARTS

ATEX E IECEX iHATHOR SAFETY AND ISOLATION SWITCH IN BOX - DIMENSIONS (mm)

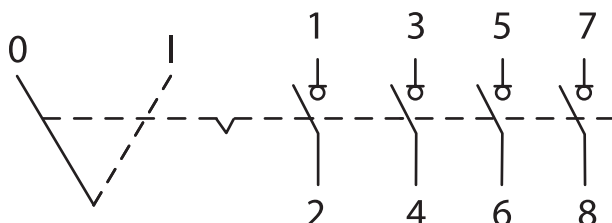
25A							
	A	B	C	F	J	N	M
3P	175	150	110	D10	R5	87,5	75
4P	175	150	110	D10	R5	87,5	75
3P+N	175	150	110	D10	R5	87,5	75
6P	175	150	150	D10	R5	87,5	75
40A							
	A	B	C	F	J	N	M
3P	200	200	175	D10	R5	100	100
4P	200	200	175	D10	R5	100	100
3P+N	200	200	175	D10	R5	100	100
6P	200	200	210	D10	R5	100	100
80A							
	A	B	C	F	J	N	M
3P	250	250	200	D10	R5	125	125
4P	250	250	200	D10	R5	125	125
3P+N	250	250	200	D10	R5	125	125
6P	250	250	240	D10	R5	125	125
180A							
	A	B	C	F	J	N	M
3P	350	275	250	D10	R5	175	137,5
4P	350	275	250	D10	R5	175	137,5
3P+N	350	275	250	D10	R5	175	137,5
6P	350	275	300	D10	R5	175	137,5



# iHATHOR EX ENCLOSED SAFETY SWITCH ATEX & IECEX SERIES

## ELECTRICAL DIAGRAM

The electrical diagram is the following in case you have chosen four poles.



## REFERENCES

This motor protection includes some different and as consequence of this we have created the next table to know the equipment's code.

Example safety switch in box with 25A rated current, handle in red colour, with 4 poles and one auxiliary contact normally open and another normally closed: SSIS/25-R-4P-NONC-EX

TYPE	RATED CURRENT (A)	HANDLE'S COLOUR SWITCH	NUMBER OF POLES	AUXILIARY CONTACTS	EX
SSIS	To choose one	To choose between the black and red one	To choose between 3 poles, 3 poles + neutral, 4 poles and 6 poles	To choose one. In case of want nothing, not write	EX
	25 40 80 180	R  N	3P 3PN 4P 6P	NONC 2NC 2NO NC NO	



# IHATHOR EX ENCLOSED SWITCH DISCONNECTOR ATEX & IECEx SERIES

## Robust and Easy to Install



Example 25A with emergency selector



Example 180A with standard selector

Atex e IECEx enclosed switch disconnectors: the enclosure has a hinged door, with door lock, made in stainless steel grade AISI 304L available in currents 25A, 40A, 80A and 180A. The cover is interlocked and can not be opened when switch is on. Suitable for outdoor and indoor use.

Allows work with a machine to safely maintain, clean and overhaul it as long as the switch is in the OFF position. It's made up of two components:

- The control component is a selector, which allows the current to go through the circuit or not. The ON position (I) allows the current, so blocks access to the machine through the mechanical blocker. The OFF position (0) blocks the current, to allow any work on the machine to be carried out.
- The isolation module allows the current to go through the circuit when the selector is in the ON position, and keep the current when the selector is in the OFF one.

This kind of switch is commonly used in any industry which uses machines, because the electrical circuits and tri-phase asynchronous motors need the energy supply and the installation kept separate, in places considered as potentially explosive, such as zones I, 2, 21 and 22. The switch is protected by a stainless steel AISI 316L enclosure, specifically designed, waterproof, antirust and with IP66 protection degree. It has a protection "Ex e" and "Ex d", which allows use in zones with a high explosion risk.

➔ [FOR MORE INFORMATION CLICK HERE](#)

## ADVANTAGES

- It is impossible to start the machine when working on it thanks to the mechanical blocking of the disconnectors.
- It gives a total block.
- It's a necessary device in order to carry out maintaining, cleaning or overhauling.
- Enclosure is made in AISI 316L stainless steel for marine or highly corrosive places.

# IHATHOR EX ENCLOSED SWITCH DISCONNECTOR ATEX & IECEX SERIES

## FEATURES

The Ex switch rated current is between 25 and 180A.

It can work between two temperature ranges, which give it a higher use capacity.

- $-20^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$
- $-20^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

The Ex enclosure has:

- The joint between the cover and body, is designed to secure an IP66 degree protection.
- The selector has an IP65 degree protection.
- It's designed with stainless steel AISI 304L.
- It includes two cable glands with "Ex e" protection in either M25 nickel plated brass or in stainless steel.
- It has four wall brackets.
- It has "Ex e" and "Ex d" protection, for use it in zones 1, 2, 21 and 22 with explosive atmospheres with dust and gas.



## PROTECTION MODE

This equipment is certified for use in potentially explosive atmospheres in 1, 2, 21 and 22 zones and it has "Ex e" and "Ex d" (protection).

Atex mark:

- II2G Ex d e IICT6/T5 Gb
- II2D Ex tb IIIC T85°C / T100°C Db
- Certificate number: LOM I7ATEX1011

IECEX mark:

- Ex d e IICT6/T5 Gb
- Ex tb IIIC T85°C/T100°C Db

## OPTIONS

- There are two kinds of Ex selector; one normal and the other an emergency selector; in red and yellow.
- Choice of poles between 3 poles, 3 poles + neutral, 4 poles and 6 poles.
- Possibility of including auxiliary contacts.
- Enclosure is made in AISI 316L stainless steel for marine or highly corrosive places.
- Ex cable glands available in any size and thread.

## NORMATIVE

Atex directive and regulation:

- Atex directive 2014/34/EU
- EN 60079-0:2012
- EN 60079-1:2007
- EN 60079-7:2015
- EN 60079-31:2010

IECEX regulation:

- IEC 60079-0:2011
- IEC 60079-1:2006
- IEC 60079-7:2015
- IEC 60079-31:2013

Enclosure regulation:

- IP regulation (IP65): IEC 60529
- IK regulation (IK10): IEC 62262

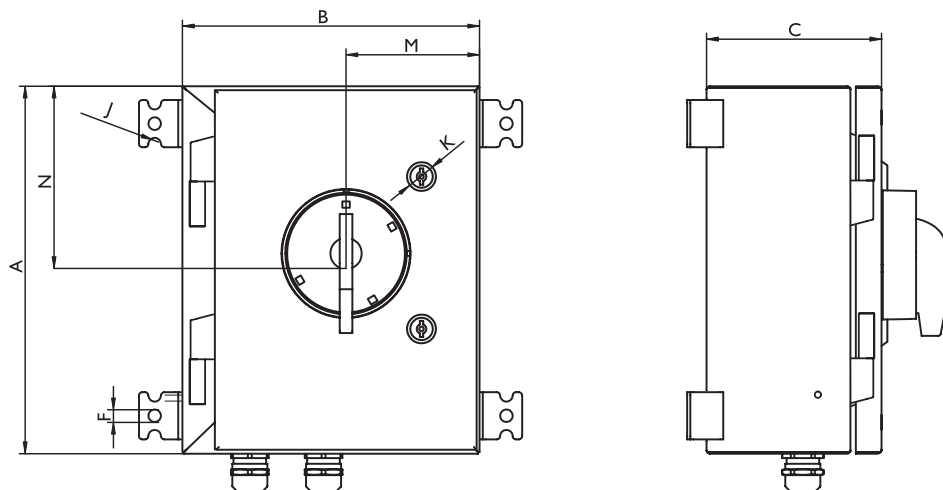
Low voltage directive and regulation:

- Directive 2014/35/EU
- EN 61439-1:2011
- EN 61439-2:2011

# IHATHOR EX ENCLOSED SWITCH DISCONNECTOR ATEX & IECEX SERIES

## BLUEPRINT AND DIMENSIONS

The planes are the same for all models, even if the measurements change.



**10**  
YEARS

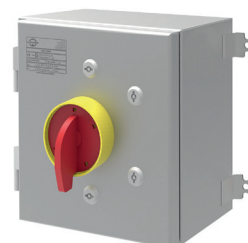
**GUARANTEE**  
FOR STAINLESS  
ANTICORROSIVE

**5**  
YEARS

**GUARANTEE**  
FOR MECHANICAL  
PARTS

ATEX E IECEX IHATHOR SAFETY AND ISOLATION SWITCH IN CABINET - DIMENSIONS (mm)

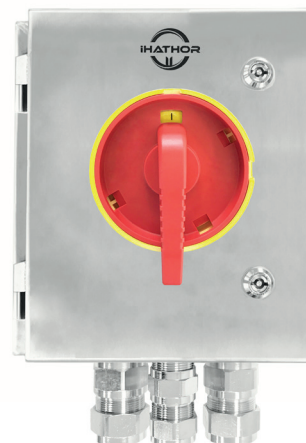
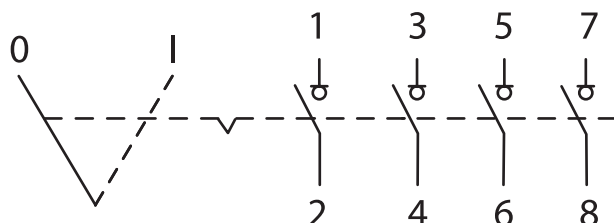
25A								
	A	B	C	F	J	K	N	M
3P	300	250	150	D10	R5	D27	150	125
4P	300	250	150	D10	R5	D27	150	125
3P+N	300	250	150	D10	R5	D27	150	125
6P	300	250	200	D10	R5	D27	150	125
40A								
	A	B	C	F	J	K	N	M
3P	270	270	200	D10	R5	D12	135	135
4P	270	270	200	D10	R5	D12	135	135
3P+N	270	270	200	D10	R5	D12	135	135
6P	270	270	250	D10	R5	D12	135	135
80A								
	A	B	C	F	J	K	N	M
3P	300	300	200	D10	R5	D12	150	150
4P	300	300	200	D10	R5	D12	150	150
3P+N	300	300	200	D10	R5	D12	150	150
6P	300	300	250	D10	R5	D12	150	150
180A								
	A	B	C	F	J	K	N	M
3P	350	320	250	D10	R5	D12	175	160
4P	350	320	250	D10	R5	D12	175	160
3P+N	350	320	250	D10	R5	D12	175	160
6P	350	320	300	D10	R5	D12	175	160



## IHATHOR EX ENCLOSED SWITCH DISCONNECTOR ATEX & IECEx SERIES

### ELECTRICAL DIAGRAM

The electrical diagram is the following in case you have chosen four poles.



### REFERENCES

This motor protection includes some different and as consequence of this we have created the next table to know the equipment's code.

Example safety switch in cabinet with 40A rated current, handle in red colour, with 4 poles and one auxiliary contact normally open and another normally closed: SSIS/40-R-4P-NONC-EX-P

TYPE	RATED CURRENT (A)	HANDLE'S COLOUR SWITCH	NUMBER OF POLES	AUXILIARY CONTACTS	EX-P
SSIS	To choose one	To choose between the black and red one	To choose between 3 poles, 3 poles + neutral, 4 poles and 6 poles	To choose one. In case of want nothing, not write	EX-P
	25 40 80 180	R  N	3P 3PN 4P 6P	NONC 2NC 2NO NC NO	



# iHATHOR GRP SAFETY AND ISOLATION SWITCH ATEX & IECEX SERIES

## Robust and Easy to Install



Example 16A



Example 25A



Example 40A



Example 80A



Example 180A

The GRP Ex safety and isolation switch, allows work with a machine to safely maintain, clean and overhaul it as long as the switch is in the OFF position.

The GRP Ex safety and isolation switch are made of glass fibre reinforced polyester "Ex e". All the metal elements are anti-corrosive rust proof. Concave-convex joints between the covers and bodies are designed to mount an air-foam silicone bar, which secure an IP66 degree of protection. Terminal boxes are used for dividing and connecting wires for various electrical apparatus and instruments in the circuits. Installation is certified for zones I, 2, 21 and 22; with features of high corrosion protection, water-proof and dustproof, they can meet the requirements in chemical, petrochemical and marine industries.

Separately certified Ex load isolation switch module is mounted inside. It can be used to disconnect the power when there is maintenance, clean and repair in the circuit with frequency AC50/60Hz, rated voltage 230V and 690V, rated current 16~180A.

This kind of switch is commonly used in any industry which uses machines, because the electrical circuits and tri-phase asynchronous motors need the energy supply and the installation kept separate, in places considered as potentially explosive, such as zones I, 2, 21 and 22.

➔ [FOR MORE INFORMATION CLICK HERE](#)

## iHATHOR GRP SAFETY AND ISOLATION SWITCH ATEX & IECEX SERIES

### CHARACTERISTICS

- Explosion protection: Zones I, 2, 21 and 22.
- Degree of protection IP66.
- IECEx and ATEX international certification.
- Switch is with interlock which is in the state of lock in, the switch is not turn on.
- Operation handle with padlock device.
- Utilization category: AC-23, AC-3.
- Enclosure features:
  - The enclosures of black are made of glass fibre reinforced polyester and concave-convex joints between the covers and bodies are designed to mount an air-foam silicone bar.
  - The entry may have polyamide, nickel-plated or stainless steel Ex cable glands. The unused entries must be sealed with the stopping plugs.



### OPTIONS

- The Ex switch rated current is between: 18A, 25A, 40A, 80A and 180A.
- The switch has two models of selectors:
  - black operation handle is standard type
  - red/yellow operation handle is emergency stop type
- Choice of poles between 3 poles, 3 poles + neutral, 4 poles and 6 poles.
- Possibility of including auxiliary contacts.
- ATEX cable glands:
  - polyamide
  - nickel-plated brass
  - stainless steel AISI 303L, AISI 304L or AISI 316L

### ADVANTAGES

- It can be used to disconnect the power when there is maintenance, clean and repair in the circuit.
- Get a total stoppage of the machinery so that the necessary activities can be carried out without any risk to the operator.
- It is impossible to start the machine when working on it thanks to the mechanical blocking of the disconnecter.
- Boxes reinforced polyester ATEX boxes with high corrosion protection, water-proof and dustproof.

## iHATHOR GRP SAFETY AND ISOLATION SWITCH ATEX & IECEX SERIES

### PROTECTION MODE

This equipment is certified for use in potentially explosive atmospheres in I, 2, 21 and 22 zones and it has "Ex e" and "Ex d" (protection).

Atex mark:

- CML I9ATEX3303X
- II 2GD Ex db eb II CT6/T5 Gb

- Ex tb III T80°C/T95°C Db

IECEX mark:

- IECEX CML I9.0088X
- Ex db eb II CT6/T5 Gb
- Ex tb III CT80°C/T95°C Db

### NORMATIVE

Atex directive and regulations:

- Atex directive 2014/34/UE
- EN 60079-0:2018
- EN 60079-1:2014
- EN 60079-7:2015
- EN 60079-31:2014

IECEX regulations:

- IEC 60079-0:2018
- IEC 60079-1:2014
- IEC 60079-7:2015
- IEC 60079-31:2014

Enclosure regulations:

- Degree of protection IP66

- Certificate numbers:

- IECEX CML I9.0088X
- CML I9 ATEX 3303X

- Protection type:

- II 2GD Ex db eb ib mb II CT5 Gb
- Ex ib tb II CT95°C Db

- Normative:

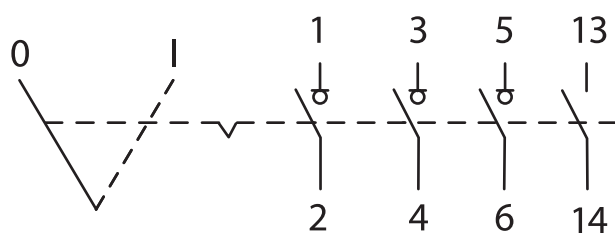
- Directive 2014/34/EU
- Operating temperature (ambience):
- $-40^{\circ}\text{C} < T_a < +40/55^{\circ}\text{C}$

Low voltage directive and regulation:

- Directive 2014/35/UE
- EN 61439-1:2011
- EN 61439-2:2011

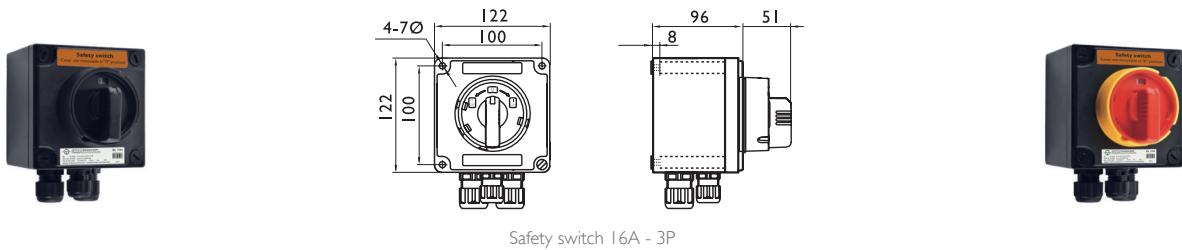
### ELECTRICAL DIAGRAM

The electrical diagram is the following in case you have chosen four poles.



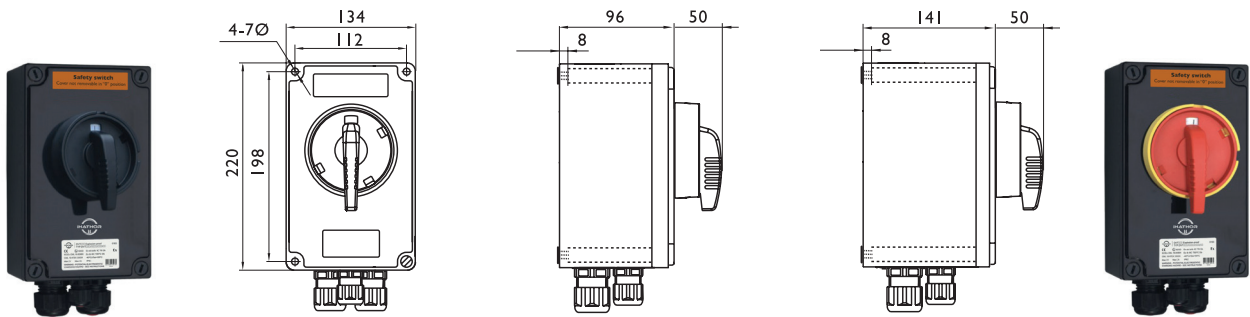
iHATHOR GRP SAFETY AND ISOLATION SWITCH ATEX & IECEX SERIES

DIMENSIONS AND REFERENCES



Safety switch 16A - 3P

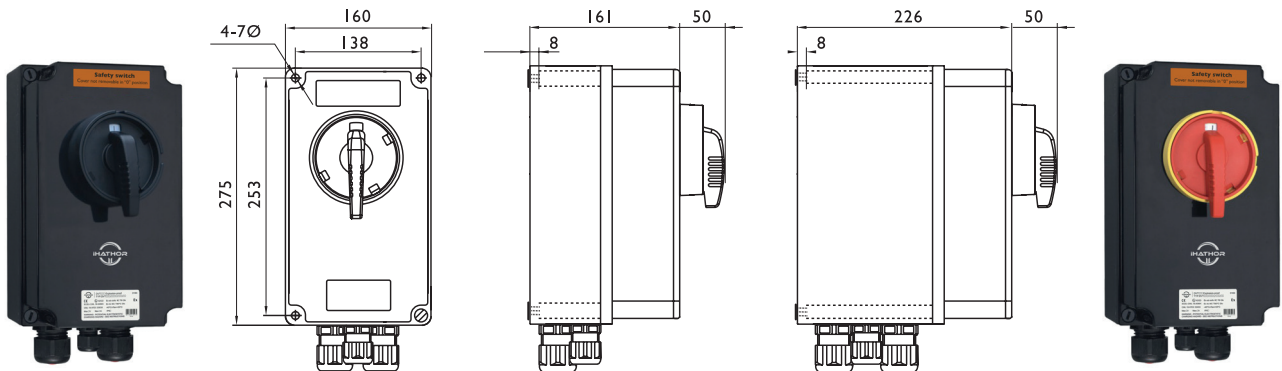
GRP SAFETY SWITCH - 16A						
RATED CURRENT	VOLTAGE	TERMINAL	RATED INSULATION VOLTAGE	RATED IMPULSE WITHSTAND VOLTAGE	RATED SHORT-TIME WITHSTAND CURRENT (Icw)	RATED SHORT-TIME MARKING CAPACITY
Max. 16A	Max. 400V	2x2.5mm²	690V	6KV	10KA	17KA



Safety switch 25A - 3P

Safety switch 25A - 6P

GRP SAFETY SWITCH - 25A						
RATED CURRENT	TERMINAL	CAPACITY OF SWITCH	RATED INSULATION VOLTAGE	RATED IMPULSE WITHSTAND VOLTAGE	RATED SHORT-TIME WITHSTAND CURRENT (Icw)	RATED SHORT-TIME MARKING CAPACITY
Max. 25A	2x4mm²	230V 25A   400V 25A 500V 20A   690V 16A	800V	6KV	3KA	10KA



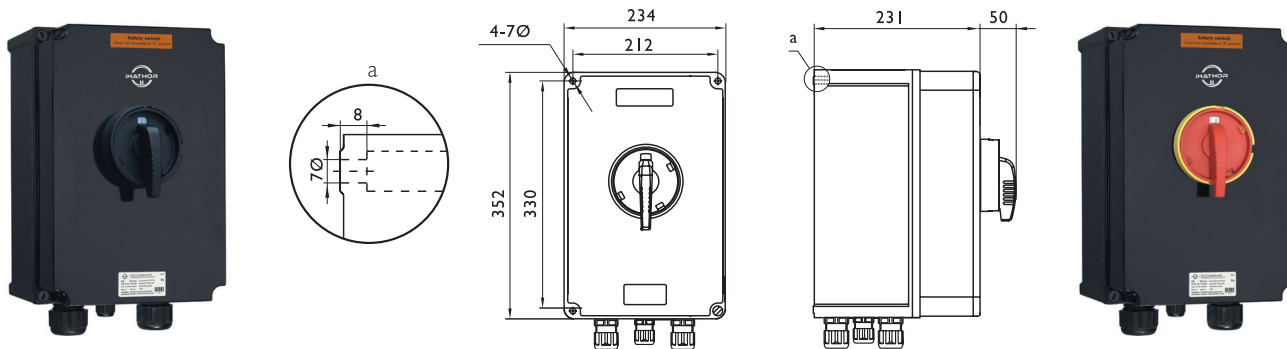
Safety switch 40A - 3P

Safety switch 40A - 6P

GRP SAFETY SWITCH - 40A						
RATED CURRENT	TERMINAL	CAPACITY OF SWITCH	RATED INSULATION VOLTAGE	RATED IMPULSE WITHSTAND VOLTAGE	RATED SHORT-TIME WITHSTAND CURRENT (Icw)	RATED SHORT-TIME MARKING CAPACITY
Max. 40A	2x10mm² 2x4mm² (auxiliary)	230V 40A   400V 40A 500V 40A   690V 32A	800V	6KV	3KA	10KA



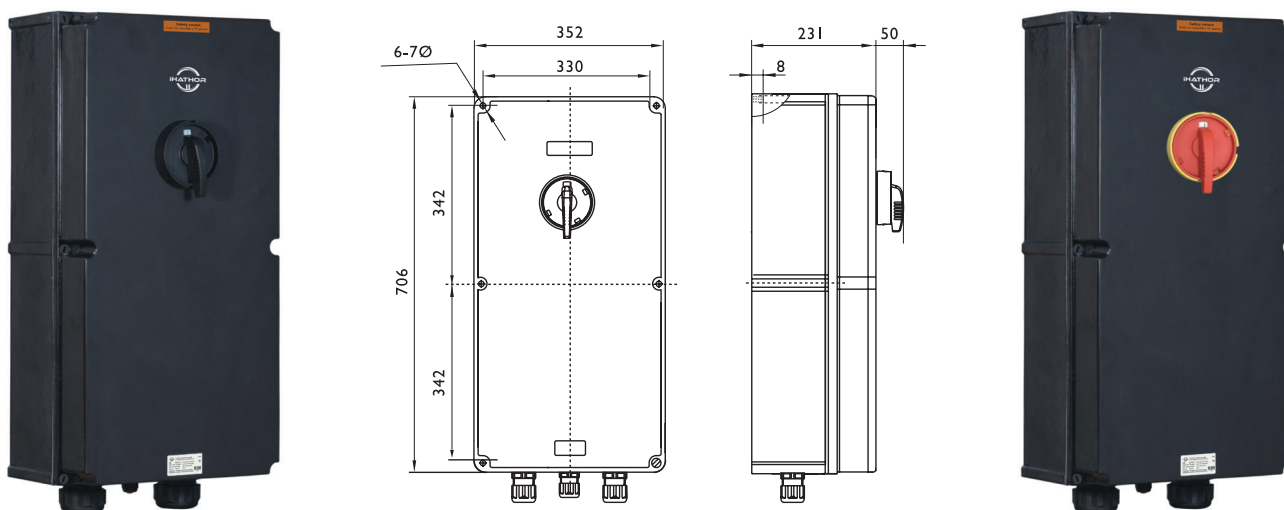
## iHATHOR GRP SAFETY AND ISOLATION SWITCH ATEX & IECEX SERIES



Safety switch 80A - 3P | 6P

GRP SAFETY SWITCH - 80A

RATED CURRENT	TERMINAL	CAPACITY OF SWITCH	RATED INSULATION VOLTAGE	RATED IMPULSE WITHSTAND VOLTAGE	RATED SHORT-TIME WITHSTAND CURRENT (Icw)	RATED SHORT-TIME MARKING CAPACITY
Max. 80A	1x35mm <sup>2</sup> 2x4mm <sup>2</sup> (auxiliary)	230V 80A   400V 80A 500V 80A   690V 63A	800V	6KV	10KA	17KA



Safety switch 180A - 3P

GRP SAFETY SWITCH - 180A

RATED CURRENT	TERMINAL	CAPACITY OF SWITCH	RATED INSULATION VOLTAGE	RATED IMPULSE WITHSTAND VOLTAGE	RATED SHORT-TIME WITHSTAND CURRENT (Icw)	RATED SHORT-TIME MARKING CAPACITY
Max. 180A	1x50/70mm <sup>2</sup> (125A) 1x120mm <sup>2</sup> (180A) 2x4mm <sup>2</sup> (auxiliary)	230V 180A   400V 180A 500V 150A   690V 125A	800V	6KV	10KA	17KA

Reference configuration, we have created the next table to know the equipment's code. Example: SSIS-GRP/25-R-4P-NONC-EX

TYPE	RATED CURRENT (A)	HANDLE'S COLOUR SWITCH	NUMBER OF POLES	AUXILIARY CONTACTS	EX
SSIS-GRP	To choose one	To choose between the black and red one	To choose between 3 poles, 3 poles + neutral, 4 poles and 6 poles	To choose one. In case of want nothing, not write	EX
	16 25 40 80 180	R N	3P 3PN 4P 6P	NONC 2NC 2NO NC NO	

# iHATHOR ENCLOSED HYGIENIC SAFETY ISOLATORS



Examples



**Integral Sloping Roof Offers Additional Protection and Leads to Self-Draining of Liquids, Specially Designed for Food Industry**

iHATHOR Hygienic Serie is a full line of safety and isolation switches with integral sloping roof offers additional protection and leads to self-draining of liquids, specially designed for food industry. No openings, hinges where bacteria could lie, moreover the inclination of the roof prevents objects being placed on the surface and our vertical electro polished finish helps repel liquids and prevent virus and bacteria building up on the surface.

iHATHOR enclosed hygienic safety isolators on-load, are available from 20A to 1800A, a large range for solving the different necessity of market.

Achieving an optimal design for facility it's installation and operation. Key on hand.



**FOR MORE INFORMATION CLICK HERE**



# iHATHOR ENCLOSED HYGIENIC SAFETY ISOLATORS

## APPLICATIONS

Hygienic safety switches installation where require special vigilance in compliance with their demanding regulations in places that require a high level of hygiene such as medical machinery, food industry, clean rooms, pharmaceutical industry,...

iHATHOR hygienic safety switches are reliable and provide safety to your property and your personnel in addition to providing:

- Protection against overcurrent.
- Protection against circuit overloads.
- Protection against short circuiting.
- Protection against heat-generated damage.

Safety switches are designed to interrupt the power in the event of a single fault in the circuit. Custom solutions projects for small and large series. iHATHOR is certified UL, Nema 4x.

## OPTIONS

- The most standard products are presented, options are available upon request.
- Option multiple of switch, n° of poles, current, aux. contacts,...
- Drills in base your needs.
- Option of different supports.
- Option of manufactured in different materials: stainless steel AISI 316L (enclosure maritime grade) or painted galvanized steel finish in RAL 7035 or another color.
- Design on IP67 or IP68 box.
- Possibility of Atex load switch.

## ADVANTAGES

- With electro-polished finish that helps dispel liquids and waterproof seal that prevents dirt and bacteria deposits.
- The monobloc manufacture gives total sealing and maximum resistance.
- No openings where bacteria could lie.
- Ready for installation
- Compact design.
- Possibilities in custom housing design.
- Versatility.
- Fast delivery time.
- Custom designs available.
- Quantity discount.

## NORMATIVE

- Machinery Directive 2006/42/EC (previously 89/37/EC) Food machinery and cosmetic or pharmaceutic production.
- EHEDG Guideline Hygienic Design doc. I3 machinery for open processes.
- DIN EN 1672-2:2006 for food industry machinery. IEC/EN 60947-3
- IP66 Norm IEC EN 62208 and EN 60529.
- Maximum IK10 resistance Norm IEC62208 and IEC 62262.
- UE Directive of low voltage 2014/35/UE.
- Materials intended to come into contact with food, CE 1935/2004.
- Offshore, maritime grade IP66.
- UL Standard(s) Safety: UL508A- Industrial Control Panels, CSA C22.2 No.14- Industrial Control Equipment.

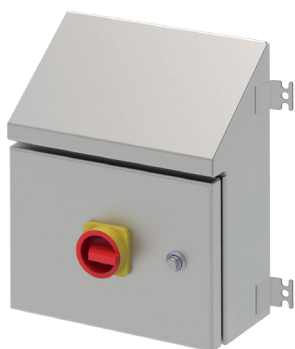


# iHATHOR ENCLOSED SAFETY ISOLATORS

## HYGIENIC BKP SERIES



Example safety switch  
standard



Example safety switch  
emergency

**Available in a Wide Range  
of Currents from 20A Up 125A**

iHATHOR enclosed hygienic safety isolators available in a wide range of currents from 20A up 125A. Is ideal for food handling facilities (clean rooms) or manufacturing processes which requires a high degree of hygiene. The European Hygienic Engineering & Design Group (EHEDG) has certified the compatibility of the safety switches with food processing systems.



**FOR MORE INFORMATION CLICK HERE**

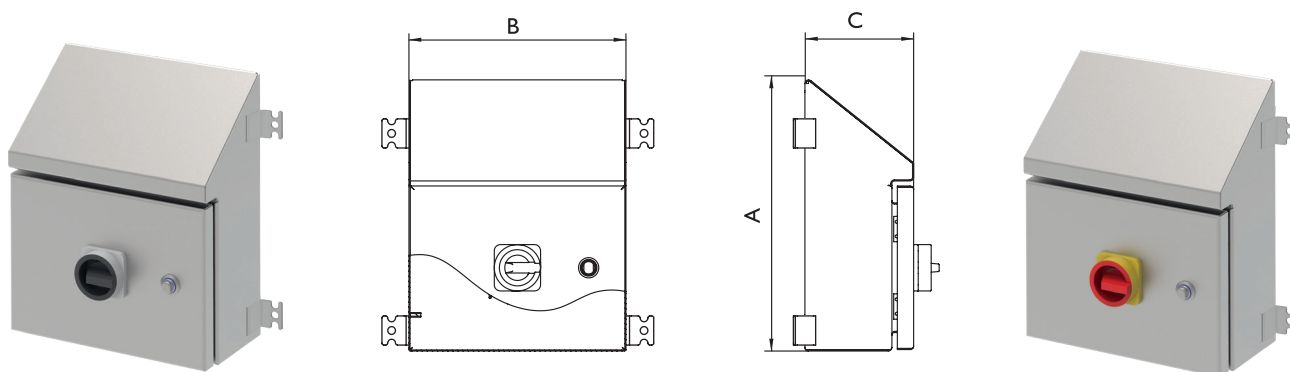
## TECHNICAL INFORMATION

### iHATHOR ENCLOSED HYGIENIC SAFETY ISOLATORS - HYGIENIC BKP SERIES

ACCORDING TO VDE 0660, IEC/EN 60947-3, IEC/EN 60947-5-1				20	25	40	63	80	125
Rated thermal current	I <sub>th</sub>	A		20	25	40	63	80	125
Rated thermal current enclosed	I <sub>the</sub>	A		20	25	40	63	80	110
Rated insulation voltage	U <sub>i</sub>	V		690	690	690	690	690	1000
Rated impulse withstands voltage	U <sub>imp</sub>	kV		6	6	6	6	6	8
Rated operational current AC	I <sub>e</sub>	AC21A	A	20	25	40	63	80	125
Making capacity	I <sub>eff</sub>	3x380-440V	A	160	190	300	370	440	850
Breaking capacity		3x220-240V	A	160	180	250	330	380	680
Breaking capacity		3x380-440V	A	160	180	250	330	380	680
Breaking capacity		3x660-690V	A	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	A	12	16	30	37	37	72
Direct switching motors	AC3	3x220-240V	kW	3	4	7,5	11	11	22
Direct switching motors		3x380-440V	kW	5,5	7,5	15	18,5	18,5	37
Direct switching motors		3x660-690V	kW	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	A	16	20	32	45	45	85
Main & safety switch	AC23A	3x220-240V	kW	4	5,5	9	15	15	30
Main & safety switch	AC23B	3x380-440V	kW	7,5	10	16	22	22	45
Main & safety switch		3x660-690V	kW	5,5	7,5	15	18,5	18,5	37
Rated conditional short-circuit current			kA <sub>eff</sub>	10	10	10	10	10	10
Max. fuse size	gL (gG)	A		25	35	50	63	80	125
Rated short-time withstand current I.s.	I <sub>cw</sub>	A		250	300	500	600	850	1500
Mechanical life		x10 <sup>3</sup>		200	200	200	100	100	100
CONNECTING CAPACITY									
Solid or stranded cable		mm <sup>2</sup>		0,5-10		1-25		4-50	
Solid or stranded cable		AWG		20-8		16-4		10-0 (10)	
Flexible cable		mm <sup>2</sup>		0,5-6		4-16		10-35	
Flexible cable		AWG		20-10		16-6		8-2	
Size of terminal screw				M3,5		M5		M6	
Tightening torque		Nm		0,8-1,7		2-4		3,5-4,5	

# ENCLOSED SAFETY ISOLATORS HYGIENIC BKP SERIES

## PLANS AND REFERENCES



### HYGIENIC BKP SERIES | 20A-25A-40A

HYGIENIC BKP SERIES (20A - 25A - 40A)	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP20A3PH	380	300	150	20	3
BKP20A4PH	380	300	150	20	4
BKP25A3PH	380	300	150	25	3
BKP25A4PH	380	300	150	25	4
BKP40A3PH	380	300	150	40	3
BKP40A4PH	380	300	150	40	4

### HYGIENIC BKP SERIES | 63A-80A

HYGIENIC BKP SERIES (63A - 80A)	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP63A3PH	380	300	150	63	3
BKP63A4PH	380	300	150	63	4
BKP80A3PH	380	300	150	80	3
BKP80A4PH	380	300	150	80	4

### HYGIENIC BKP SERIES | 100A-125A

HYGIENIC BKP SERIES (100A - 125A)	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP100A3PH	380	300	150	100	3
BKP100A4PH	380	300	150	100	4
BKP125A3PH	380	300	150	125	3
BKP125A4PH	380	300	150	125	4

# iHATHOR ENCLOSED SAFETY ISOLATORS

## HYGIENIC H0 SERIES



Example

### Rated Breaking Current of Up to 8 Times the Rated Operational Current

Enclosed hygienic safety isolators on-load Hygienic H0 Series, are available from 125A for 250A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA. Is ideal for food handling facilities (clean rooms) or manufacturing processes which requires a high degree of hygiene. The European Hygienic Engineering & Design Group (EHEDG) has certified the compatibility of the safety switches with food processing systems.



**FOR MORE INFORMATION CLICK HERE**



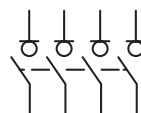
## TECHNICAL INFORMATION

iHATHOR ENCLOSED HYGIENIC SAFETY ISOLATORS - HYGIENIC H0 SERIES							
ACCORDING TO IEC/EN 60947-3				125	160	200	250
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A	125	160	200	250
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A	125	160	200	250
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A	125	160	200	250
Rated insulation voltage	U <sub>i</sub>		V	1000	1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV	8	8	8	8
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	125	160	200
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	125	160	200
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	125	160	160
Rated breaking capacity		400V	AC23	A	1000	1280	1280
Rated making capacity		400V	AC23	A	1250	1600	1600
SHORT - CIRCUIT BEHAVIOUR				125	160	200	250
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)	13	13	13	13
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms	7	7	7	7
MECHANICAL FEATURES				125	160	200	250
Number of mechanical operations (according to the standars, for other values please consult)			Cycles	8000	8000	8000	8000
Maximum weight 3P			Kg	0,85	0,85	0,9	0,9
Maximum weight 3P + N			Kg	1	1	1	1

<sup>\*(1)</sup> Rated operational frequency 50/60Hz. Other voltages or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

<sup>\*(3)</sup> Intensidad de empleo AC22B.

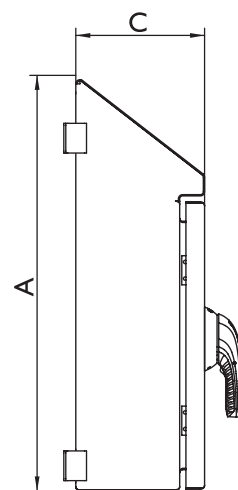
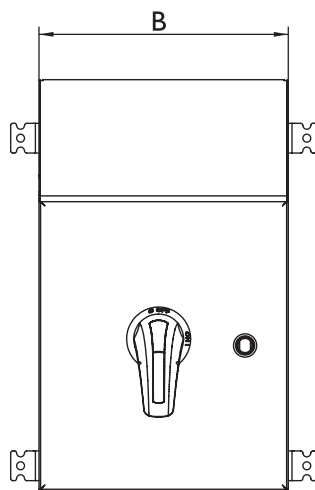


**4P**

Also available 4P switch - disconnectors under request

# ENCLOSED SAFETY ISOLATORS **HYGIENIC H0 SERIES**

## PLANS AND REFERENCES



HYGIENIC H0 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H125A3PPH	500	300	155	125A	3
H160A3PPH	500	300	155	160A	3
H125A4PPH	500	300	155	125A	4
H160A4PPH	500	300	155	160A	4
H125A3PBH	500	300	155	125A	3
H160A3PBH	500	300	155	160A	3
H200A3PBH	500	300	155	200A	3
H125A4PBH	500	300	155	125A	4
H160A4PBH	500	300	155	160A	4
H200A4PBH	500	300	155	200A	4
H200A3PPH	500	300	155	200A	3
H250A3PPH	500	300	155	250A	3
H200A4PPH	500	300	155	200A	4
H250A4PPH	500	300	155	250A	4

PP: strip connection

PB: flange connection





# iHATHOR ENCLOSED SAFETY ISOLATORS

## HYGIENIC HI SERIES



Example

### Rated Breaking Current of Up to 8 Times the Rated Operational Current

Enclosed hygienic safety isolators on-load Hygienic HI Series, are available from 315A for 400A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA. Is ideal for food handling facilities (clean rooms) or manufacturing processes which requires a high degree of hygiene. The European Hygienic Engineering & Design Group (EHEDG) has certified the compatibility of the safety switches with food processing systems.



**FOR MORE INFORMATION CLICK HERE**

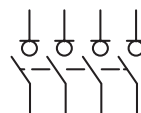
## TECHNICAL INFORMATION

### iHATHOR ENCLOSED HYGIENIC SAFETY ISOLATORS - HYGIENIC HI SERIES

ACCORDING TO IEC/EN 60947-3				315	400
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A	315	400
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A	315	400
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A	315	400
Rated insulation voltage	U <sub>i</sub>		V	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV	8	8
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	315
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	315
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	315
Rated breaking capacity		400V	AC23	A	2520
Rated making capacity		400V	AC23	A	3150
SHORT - CIRCUIT BEHAVIOUR				315	400
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)	20	20
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms	12	12
MECHANICAL FEATURES				315	400
Number of mechanical operations (according to the standards, for other values please consult)			Cycles	8000	5000
Maximum weight 3P			Kg	1,7	1,9
Maximum weight 3P + N			Kg	1,9	2,1

<sup>\*(1)</sup> Rated operational frequency 50/60Hz. Other voltages or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

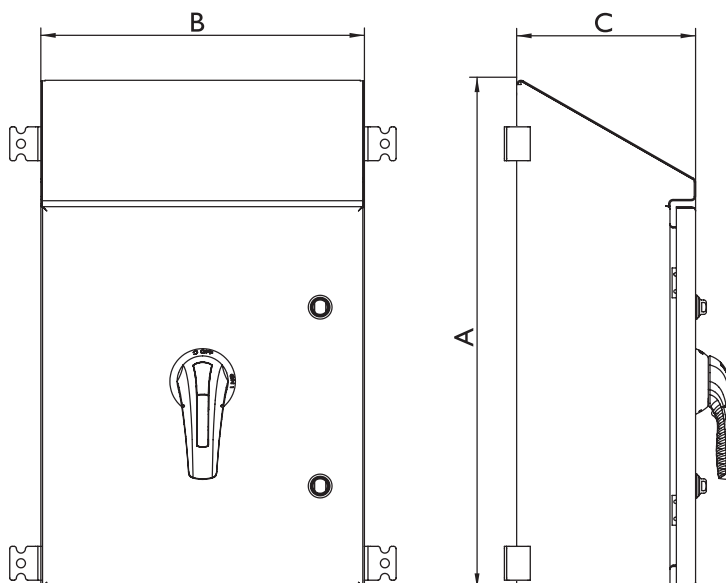


**4P**

Also available 4P switch -  
disconnectors under request

# ENCLOSED SAFETY ISOLATORS **HYGIENIC HI SERIES**

## PLANS AND REFERENCES



HYGIENIC HI SERIES		DIMENSIONS (mm)			
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H315A3PPH	600	380	210	315A	3
H315A4PPH	600	380	210	315A	4
H400A3PPH	600	380	210	400A	3
H400A4PPH	600	380	210	400A	4



# iHATHOR ENCLOSED SAFETY ISOLATORS HYGIENIC H2 SERIES



Example

## Rated Breaking Current of Up to 8 Times the Rated Operational Current

Enclosed hygienic safety isolators on-load Hygienic H2 Series, are available from 500A for 800A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA. Is ideal for food handling facilities (clean rooms) or manufacturing processes which requires a high degree of hygiene. The European Hygienic Engineering & Design Group (EHEDG) has certified the compatibility of the safety switches with food processing systems.



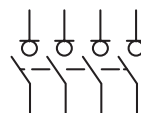
**FOR MORE INFORMATION CLICK HERE**

## TECHNICAL INFORMATION

iHATHOR ENCLOSED HYGIENIC SAFETY ISOLATORS - HYGIENIC H2 SERIES					500	630	800
ACCORDING TO IEC/EN 60947-3							
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A		500	630	800
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A		500	630	720
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A		500	630	640
Rated insulation voltage	U <sub>i</sub>		V		1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV		12	12	12
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	500	630	800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	500	630	800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	500	630	800
Rated breaking capacity		400V	AC23	A	4000	5000	6400
Rated making capacity		400V	AC23	A	5000	6300	8000
SHORT - CIRCUIT BEHAVIOUR					500	630	800
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (peak)		26	26	26
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms		16	16	16
MECHANICAL FEATURES					500	630	800
Number of mechanical operations (according to the standards, for other values please consult)			Cycles		5000	5000	3000
Maximum weight 3P			Kg		4,2	4,2	4,2
Maximum weight 3P + N			Kg		4,5	4,5	4,5

<sup>\*(1)</sup> Rated operational frequency 50/60Hz. Other voltages or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)



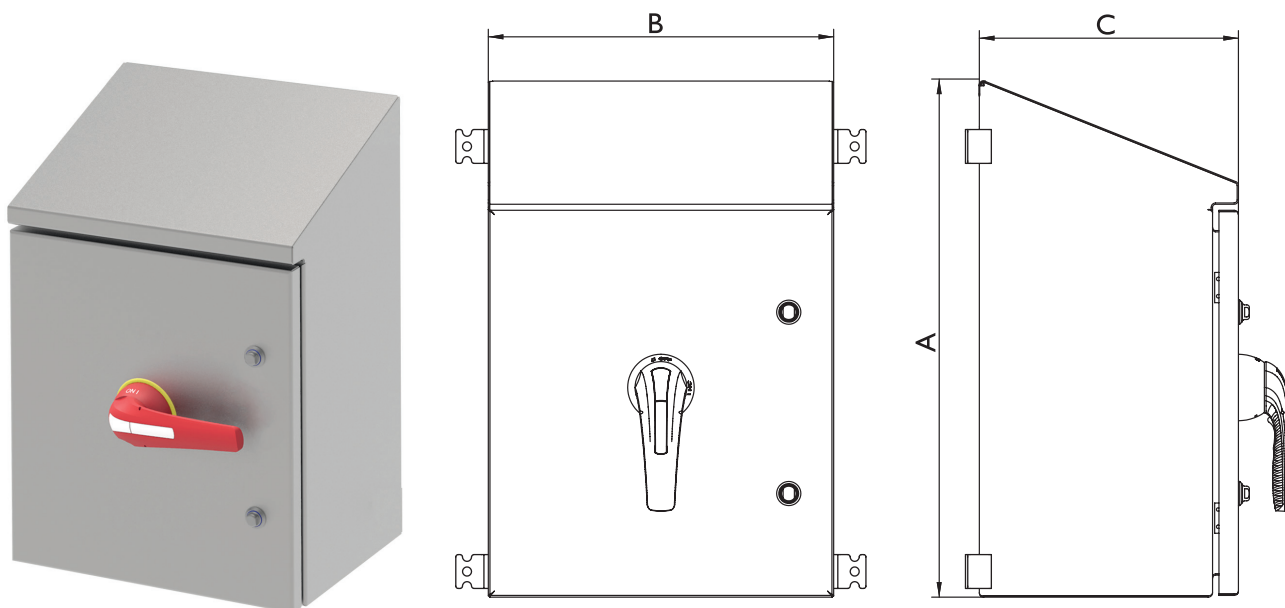
**4P**

Also available 4P switch -  
disconnectors under request



# ENCLOSED SAFETY ISOLATORS HYGIENIC H2 SERIES

## PLANS AND REFERENCES



HYGIENIC H2 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H500A3PPH	600	400	300	500A	3
H500A4PPH	600	400	300	500A	4
H630A3PPH	600	400	300	630A	3
H630A4PPH	600	400	300	630A	4
H800A3PPH	600	400	300	800A	3
H800A4PPH	600	400	300	800A	4





# iHATHOR ENCLOSED SAFETY ISOLATORS

## HYGIENIC H3 SERIES



Example

### Rated Breaking Current of Up to 8 Times the Rated Operational Current

Enclosed hygienic safety isolators on-load Hygienic H3 Series, are available from 1000A for 1800A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA. Is ideal for food handling facilities (clean rooms) or manufacturing processes which requires a high degree of hygiene. The European Hygienic Engineering & Design Group (EHEDG) has certified the compatibility of the safety switches with food processing systems.



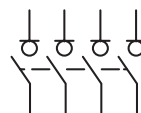
**FOR MORE INFORMATION CLICK HERE**

## TECHNICAL INFORMATION

iHATHOR ENCLOSED HYGIENIC SAFETY ISOLATORS - HYGIENIC H3 SERIES					1000	1250	1600	1800
ACCORDING TO IEC/EN 60947-3								
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A		1000	1250	1600	1800
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A		1000	1250	1600	1800
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A		1000	1250	1600	1600
Rated insulation voltage	U <sub>i</sub>		V		1000	1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV		12	12	12	12
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	1000	1250	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	1000	1250	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	-	-	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 800V	AC21B	A	-	-	-	1250
Rated breaking capacity		400V	AC23	A	3000	3750	4800	5400
Rated making capacity		400V	AC23	A	3000	3750	4800	5400
SHORT - CIRCUIT BEHAVIOUR					1000	1250	1600	1800
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)		60	60	75	75
Rated short-time withstand current 1 s.	I <sub>cw</sub>		kA rms		25	25	50	50
MECHANICAL FEATURES					1000	1250	1600	1800
Number of mechanical operations (according to the standars, for other values please consult)			Cycles		3000	3000	3000	3000
Maximum weight 3P			Kg		18,5	18,5	18,5	18,5
Maximum weight 3P + N			Kg		20,8	20,8	20,8	20,8

<sup>\*(1)</sup> Rated operational frequency 50/60Hz. Other voltages or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

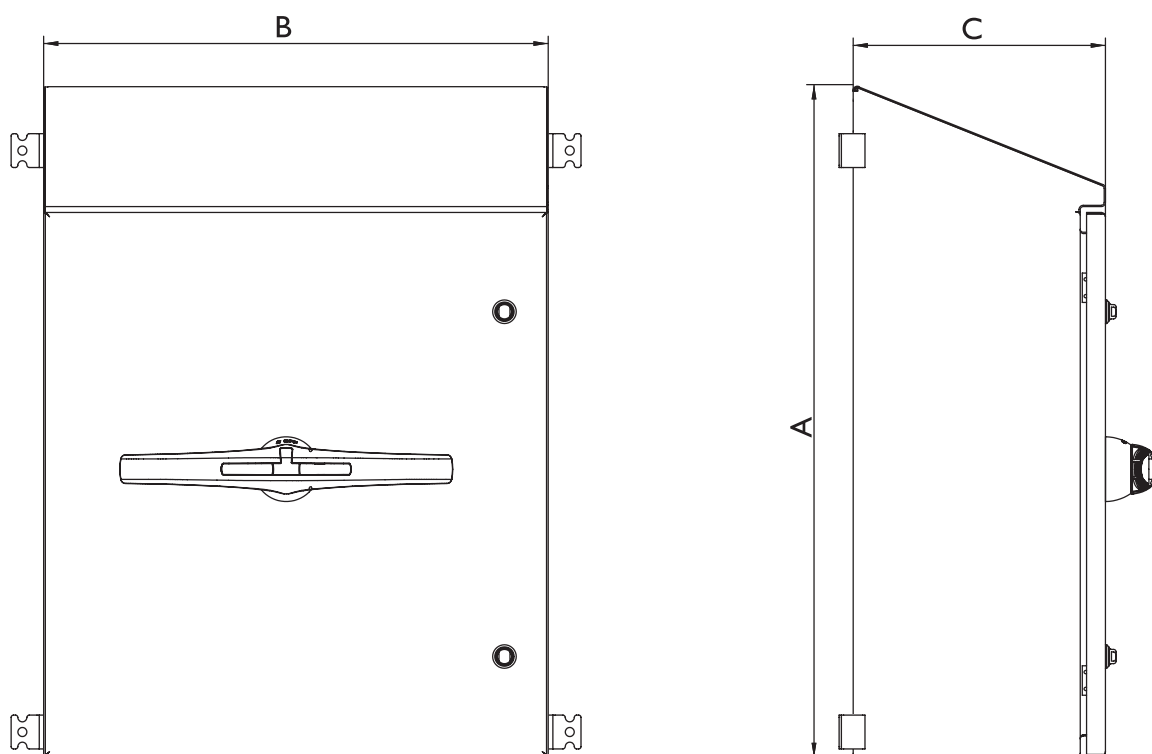


**4P**

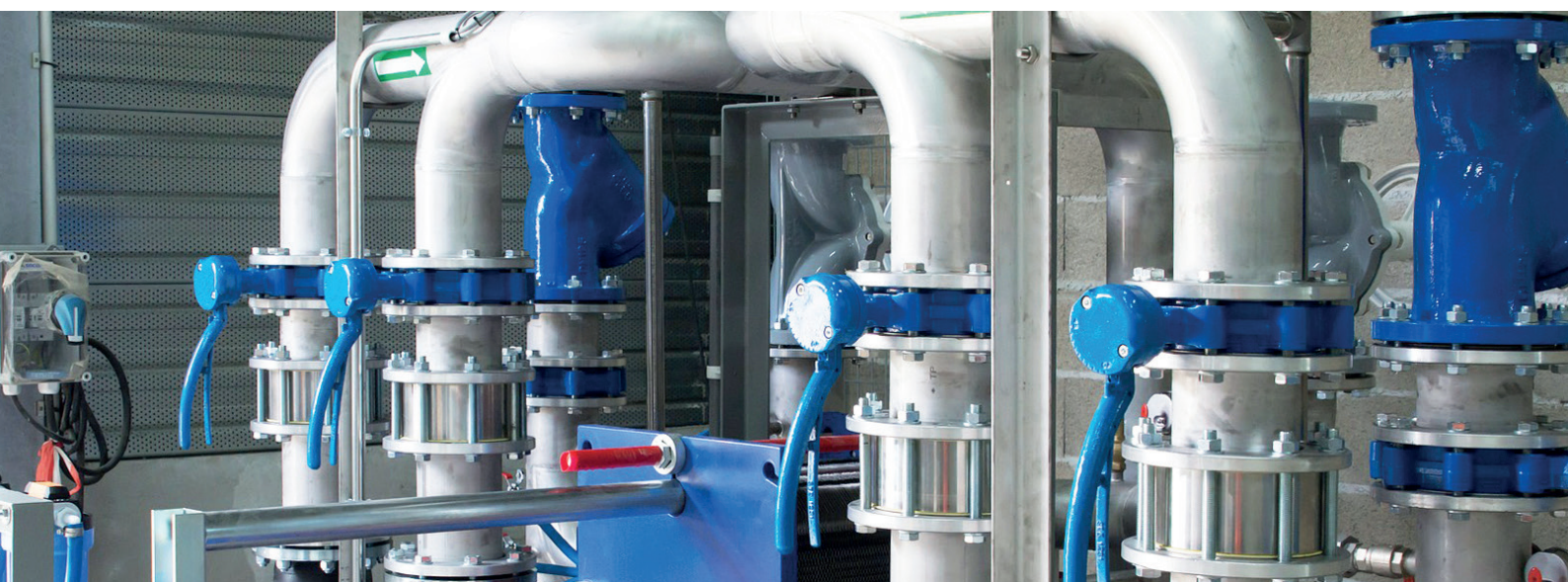
Also available 4P switch - disconnectors under request

# ENCLOSED SAFETY ISOLATORS HYGIENIC H3 SERIES

## PLANS AND REFERENCES



HYGIENIC H3 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
HI 000A3PPH	800	600	300	I 000A	3
HI 000A4PPH	800	600	300	I 000A	4
HI 250A3PPH	800	600	300	I 250A	3
HI 250A4PPH	800	600	300	I 250A	4
HI 600A3PPH	800	600	300	I 600A	3
HI 600A4PPH	800	600	300	I 600A	4
HI 800A3PPH	800	600	300	I 800A	3
HI 800A4PPH	800	600	300	I 800A	4



# EMC SERIES iHATHOR SAFETY SWITCHES

Electromagnetic Compatibility is defined in the EMC Directive as “the ability of equipments to function satisfactorily in a electromagnetic environment without introducing intolerable electromagnetic disturbances to other equipment in the same environment” and covers two basic principles:

- Not to disturb the other equipment and not to emit disturbances above a given level (this is called “disturbance emission”).
- Not to be disturbed by other equipment with a sufficient level of protection so as not to be disturbed easily (this is called “disturbance immunity”).

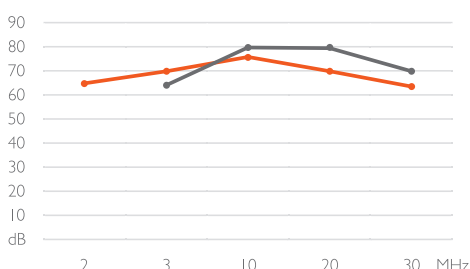
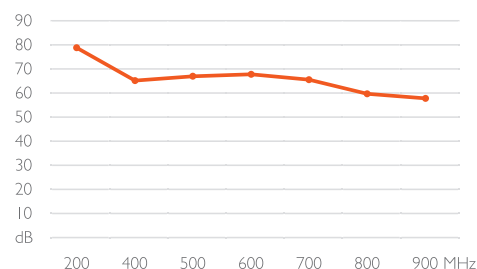
Electric, magnetic and electromagnetic fields are everywhere. Also around safety and isolation switches: they are mostly conventional electromagnetic fields such as grid connection lines, signal and control lines, and electrical and electronic modules which radiate electromagnetic fields.

iHATHOR safety and isolation switches gives the protection needed for conventional electromagnetic fields. However, for some intense electromagnetic fields like microwaves, EDM facilities by arc, HF welding technique it is necessary to create a complete screening effect.

## EFFECTIVENESS OF SCREENING IN EMC iHATHOR SWITCHES

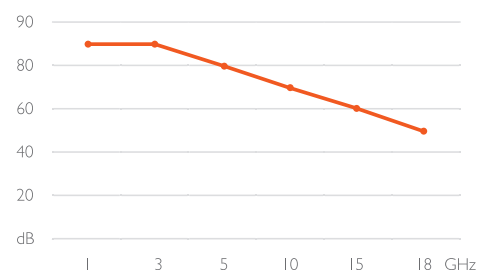
iHATHOR safety and isolation switches offer optimum shielding effect to achieve electromagnetic compatibility, both in conventional and strong electromagnetic fields.

FREQUENCY	ELECTRIC FIELD AND PLANE WAVES
200 MHz	78 dB
400 MHz	64 dB
500 MHz	66 dB
600 MHz	67 dB
700 MHz	64 dB
800 MHz	60 dB
900 MHz	58 dB



FREQUENCY	MAGNETIC FIELD	ELECTRIC FIELD
2 MHz	--	66 dB
3 MHz	63 dB	--
10 MHz	80 dB	75 dB
20 MHz	80 dB	69 dB
30 MHz	70 dB	65 dB

FREQUENCY	PLANE WAVES
1 GHz	86 dB
3 GHz	86 dB
5 GHz	80 dB
10 GHz	69 dB
15 GHz	60 dB
18 GHz	50 dB

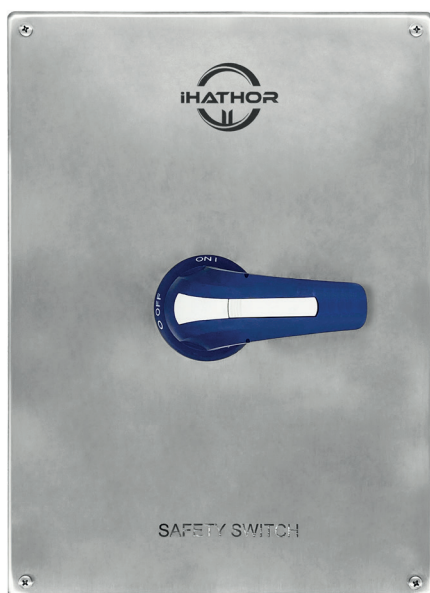




# EMC SERIES iHATHOR SAFETY SWITCHES



Examples



**Provide Safety  
to your Property  
and your Personnel**

iHATHOR EMC Series is a full line of safety and isolation switches of indoor and outdoor applications (made in stainless steel AISI 304L). We design and manufacture every product ourselves in our own factories. Focused heavily on safety, iHATHOR's switching device product line brings state-of-the art designs that can even be customized to fit your unique needs. iHATHOR switch disconnectors on-load, are available from 20A to 1800A, a large range for solving the different necessity in a electromagnetic environment . Achieving an optimal design for facility it's installation and operation. Key on hand.



**FOR MORE INFORMATION CLICK HERE**





# EMC SERIES iHATHOR SAFETY SWITCHES

## APPLICATIONS

Safely cut off electricity in your electrical installations: aeronautics, medical equipment, professional electronics, safe in solar and wind renewable energy, offshore, maritime, power distribution, food industry, manufacturing machinery and other general industries.

iHATHOR safety switches are reliable and provide safety to your property and your personnel in addition to providing:

- Protection against in a electromagnetic environment.
- Protection against overcurrent.
- Protection against circuit overloads.
- Protection against short circuiting.

## NORMATIVE

- Complies with 2014/30/UE and EMC Directive 2014/35/UE.
- IEC/EN 60947-3
- IP66 Norm IEC EN 62208 and EN 60529.
- Maximum IK10 resistance Norm IEC62208 and IEC 62262.
- UE Directive of low voltage 2014/35/UE.
- Materials intended to come into contact with food, CE 1935/2004.
- Offshore, maritime grade IP66.
- UL Standard(s) Safety: UL508A- Industrial Control Panels, CSA C22.2 No.14- Industrial Control Equipment.

## ADVANTAGES

- Ready for installation in a electromagnetic environment.
- Compact design.
- Possibilities in custom housing design.
- Versatility.
- Fast delivery time.
- Custom designs available.
- Quantity discount.



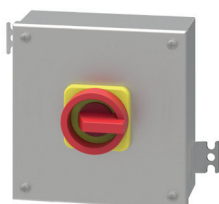
## OPTIONS

- The most standard products are presented, options are available upon request.
- Option multiple of switch, n° of poles, current, aux. contacts,...
- Drills in base your needs.
- Option of different supports.
- Option of manufactured in different materials: stainless steel AISI 316L (enclosure maritime grade) or painted galvanized steel finish in RAL 7035 or another color.
- Design on IP67 or IP68 box.
- Possibility of Atex load switch.

# iHATHOR SWITCH DISCONNECTOR EMC BKP SERIES



Example 20A - 25A - 40A



Example 63A - 80A



Example 100A - 125A

**Available in a Wide Range  
of Currents from 20A Up 125A**

iHATHOR switch disconnectors available in a wide range of currents from 20A up 125A. EMC BKP Series has been designed according to standard IEC/EN60947-3 and 2014/30/UE for its use in low voltage civil and industrial installations and electromagnetic environment; also are certificated to UL 508 for use as manual motor controllers.



**FOR MORE INFORMATION CLICK HERE**

## TECHNICAL INFORMATION

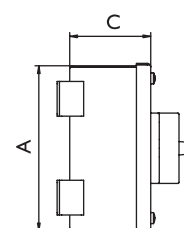
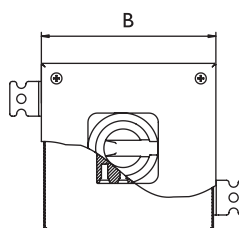
### iHATHOR SWITCH DISCONNECTORS - EMC BKP SERIES

ACCORDING TO VDE 0660, IEC/EN 60947-3, IEC/EN 60947-5-1				20	25	40	63	80	125
Rated thermal current	I <sub>th</sub>	A		20	25	40	63	80	125
Rated thermal current enclosed	I <sub>the</sub>	A		20	25	40	63	80	110
Rated insulation voltage	U <sub>i</sub>	V		690	690	690	690	690	1000
Rated impulse withstands voltage	U <sub>imp</sub>	kV		6	6	6	6	6	8
Rated operational current AC	I <sub>e</sub>	AC21A	A	20	25	40	63	80	125
Making capacity	I <sub>eff</sub>	3x380-440V	A	160	190	300	370	440	850
Breaking capacity		3x220-240V	A	160	180	250	330	380	680
Breaking capacity		3x380-440V	A	160	180	250	330	380	680
Breaking capacity		3x660-690V	A	80	110	170	190	220	420
Direct switching motors	AC3	3x400V	A	12	16	30	37	37	72
Direct switching motors	AC3	3x220-240V	kW	3	4	7,5	11	11	22
Direct switching motors		3x380-440V	kW	5,5	7,5	15	18,5	18,5	37
Direct switching motors		3x660-690V	kW	5,5	7,5	15	18,5	18,5	30
Main & safety switch	AC23	3x400V	A	16	20	32	45	45	85
Main & safety switch	AC23A	3x220-240V	kW	4	5,5	9	15	15	30
Main & safety switch	AC23B	3x380-440V	kW	7,5	10	16	22	22	45
Main & safety switch		3x660-690V	kW	5,5	7,5	15	18,5	18,5	37
Rated conditional short-circuit current		kA <sub>eff</sub>		10	10	10	10	10	10
Max. fuse size	gL (gG)	A		25	35	50	63	80	125
Rated short-time withstand current I.s.	I <sub>cw</sub>	A		250	300	500	600	850	1500
Mechanical life		x10 <sup>3</sup>		200	200	200	100	100	100
CONNECTING CAPACITY									
Solid or stranded cable		mm <sup>2</sup>		0,5-10		1-25		4-50	
Solid or stranded cable		AWG		20-8		16-4		10-0 (10)	
Flexible cable		mm <sup>2</sup>		0,5-6		4-16		10-35	
Flexible cable		AWG		20-10		16-6		8-2	
Size of terminal screw				M3,5		M5		M6	
Tightening torque		Nm		0,8-1,7		2-4		3,5-4,5	

# iHATHOR SWITCH DISCONNECTOR EMC BKP SERIES

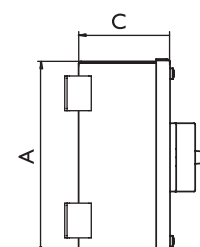
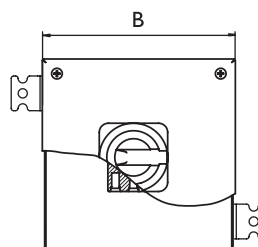
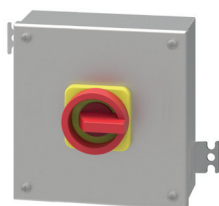
## PLANS AND REFERENCES

### BKP SERIES | 20A-25A-40A



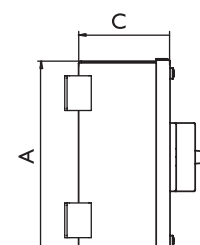
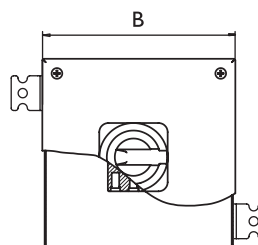
EMC BKP SERIES (20A - 25A - 40A)	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP20A3PM	160	160	90	20	3
BKP20A4PM	160	160	90	20	4
BKP25A3PM	160	160	90	25	3
BKP25A4PM	160	160	90	25	4
BKP40A3PM	160	160	90	40	3
BKP40A4PM	160	160	90	40	4

### BKP SERIES | 63A-80A



EMC BKP SERIES (63A - 80A)	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP63A3PM	200	200	120	63	3
BKP63A4PM	200	200	120	63	4
BKP80A3PM	200	200	120	80	3
BKP80A4PM	200	200	120	80	4

### BKP SERIES | 100A-125A



EMC BKP SERIES (100A - 125A)	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
BKP100A3PM	200	200	120	100	3
BKP100A4PM	200	200	120	100	4
BKP125A3PM	200	200	120	125	3
BKP125A4PM	200	200	120	125	4

# iHATHOR SWITCH DISCONNECTOR EMC H0 SERIES



Example

**Rated Breaking Current  
of Up to 8 Times  
the Rated Operational Current**

Switch disconnectors on-load EMC H0 Series, are available from 125A for 250A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA; uninterrupted duties in extreme tropic and polar conditions, as well electromagnetic environment.



**FOR MORE INFORMATION CLICK HERE**



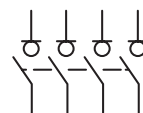
## TECHNICAL INFORMATION

iHATHOR SWITCH DISCONNECTORS - EMC H0 SERIES					125	160	200	250
ACCORDING TO IEC/EN 60947-3								
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A		125	160	200	250
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A		125	160	200	250
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A		125	160	200	250
Rated insulation voltage	U <sub>i</sub>		V		1000	1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV		8	8	8	8
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	125	160	200	250
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	125	160	200	250 <sup>*(3)</sup>
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	125	160	160	160
Rated breaking capacity		400V	AC23	A	1000	1280	1280	1280
Rated making capacity		400V	AC23	A	1250	1600	1600	1600
SHORT - CIRCUIT BEHAVIOUR					125	160	200	250
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)		13	13	13	13
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms		7	7	7	7
MECHANICAL FEATURES					125	160	200	250
Number of mechanical operations (according to the standars, for other values please consult)			Cycles		8000	8000	8000	8000
Maximum weight 3P			Kg		0,85	0,85	0,9	0,9
Maximum weight 3P + N			Kg		1	1	1	1

<sup>\*(1)</sup> Other voltages and/or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

<sup>\*(3)</sup> Intensidad de empleo AC22B.

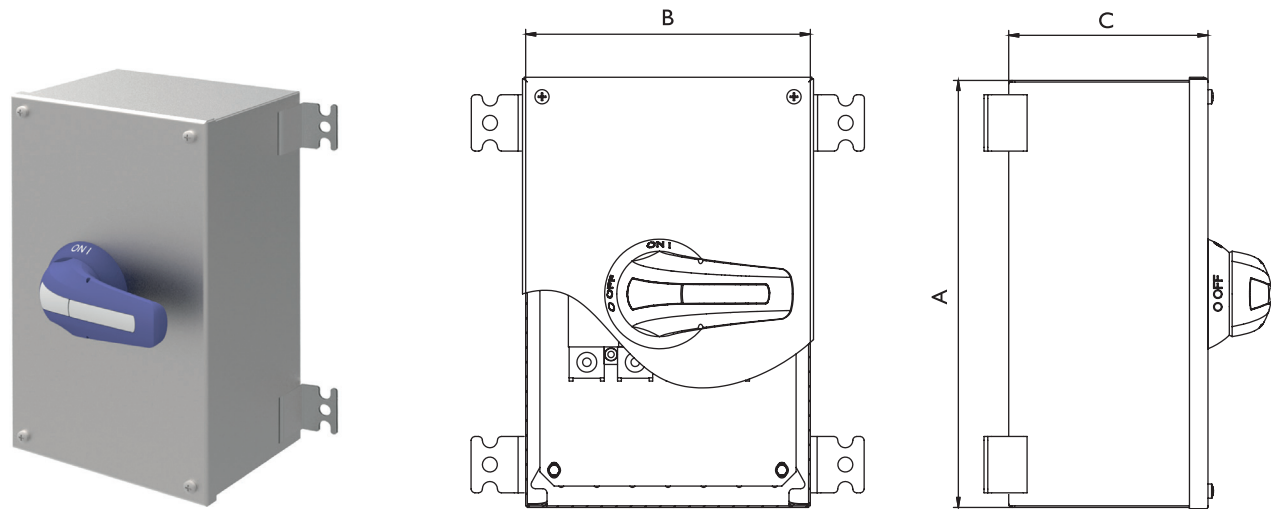


**4P**  
Also available 4P switch -  
disconnectors under request



# iHATHOR SWITCH DISCONNECTOR EMC H0 SERIES

## PLANS AND REFERENCES



EMC H0 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H125A3PPM	300	200	150	125A	3
H160A3PPM	300	200	150	160A	3
H125A4PPM	300	200	150	125A	4
H160A4PPM	300	200	150	160A	4
H125A3PBM	300	200	150	125A	3
H160A3PBM	300	200	150	160A	3
H200A3PBM	300	200	150	200A	3
H125A4PBM	300	200	150	125A	4
H160A4PBM	300	200	150	160A	4
H200A4PBM	300	200	150	200A	4
H200A3PPM	400	300	150	200A	3
H250A3PPM	400	300	150	250A	3
H200A4PPM	400	300	150	200A	4
H250A4PPM	400	300	150	250A	4

PP: strip connection

PB: flange connection



# iHATHOR SWITCH DISCONNECTOR EMC HI SERIES



Example

**Rated Breaking Current  
of Up to 8 Times  
the Rated Operational Current**

Switch disconnectors on-load EMC HI Series, are available from 315A for 400A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA; uninterrupted duties in extreme tropic and polar conditions, as well electromagnetic environment.



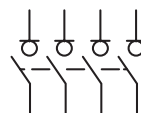
**FOR MORE INFORMATION CLICK HERE**

## TECHNICAL INFORMATION

iHATHOR SWITCH DISCONNECTORS - EMC HI SERIES					
ACCORDING TO IEC/EN 60947-3				315	400
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A	315	400
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A	315	400
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A	315	400
Rated insulation voltage	U <sub>i</sub>		V	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV	8	8
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	315
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	315
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	315
Rated breaking capacity		400V	AC23	A	2520
Rated making capacity		400V	AC23	A	3150
SHORT - CIRCUIT BEHAVIOUR				315	400
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)	20	20
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms	12	12
MECHANICAL FEATURES				315	400
Number of mechanical operations (according to the standards, for other values please consult)			Cycles	8000	5000
Maximum weight 3P			Kg	1,7	1,9
Maximum weight 3P + N			Kg	1,9	2,1

<sup>\*(1)</sup> Other voltages and/or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

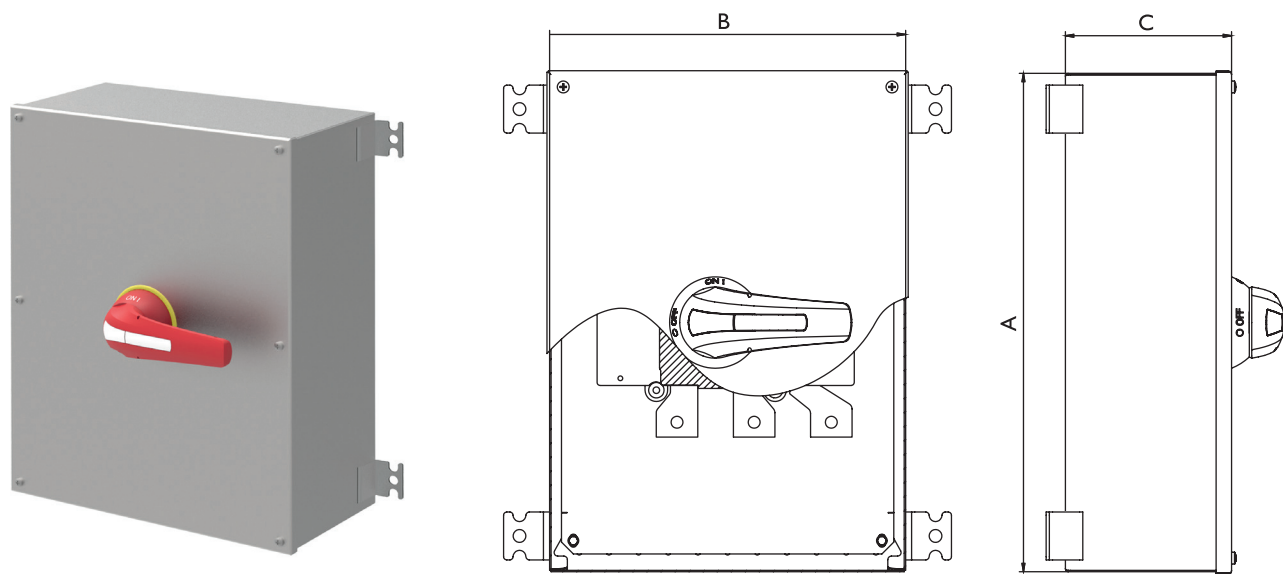


**4P**

Also available 4P switch -  
disconnectors under request

# iHATHOR SWITCH DISCONNECTOR EMC HI SERIES

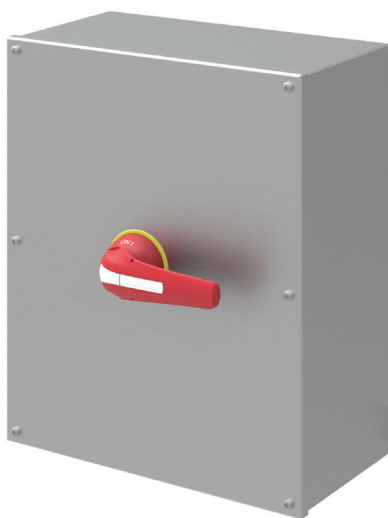
## PLANS AND REFERENCES



EMC HI SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H315A3PPM	400	300	150	315A	3
H315A4PPM	400	300	150	315A	4
H400A3PPM	500	400	200	400A	3
H400A4PPM	500	400	200	400A	4



# iHATHOR SWITCH DISCONNECTOR EMC H2 SERIES



Example

**Rated Breaking Current  
of Up to 8 Times  
the Rated Operational Current**

Switch disconnectors on-load EMC H2 Series, are available from 500A for 800A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA; uninterrupted duties in extreme tropic and polar conditions, as well electromagnetic environment.



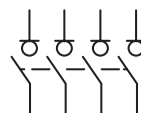
**FOR MORE INFORMATION CLICK HERE**

## TECHNICAL INFORMATION

iHATHOR SWITCH DISCONNECTORS - EMC H2 SERIES					500	630	800
ACCORDING TO IEC/EN 60947-3							
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A		500	630	800
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A		500	630	720
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A		500	630	640
Rated insulation voltage	U <sub>i</sub>		V		1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV		12	12	12
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	500	630	800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	500	630	800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	500	630	800
Rated breaking capacity		400V	AC23	A	4000	5000	6400
Rated making capacity		400V	AC23	A	5000	6300	8000
SHORT - CIRCUIT BEHAVIOUR					500	630	800
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)		26	26	26
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms		16	16	16
MECHANICAL FEATURES					500	630	800
Number of mechanical operations (according to the standards, for other values please consult)			Cycles		5000	5000	3000
Maximum weight 3P			Kg		4,2	4,2	4,2
Maximum weight 3P + N			Kg		4,5	4,5	4,5

\*<sup>(1)</sup> Other voltages and/or utilization categories. Please consult.

\*<sup>(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)



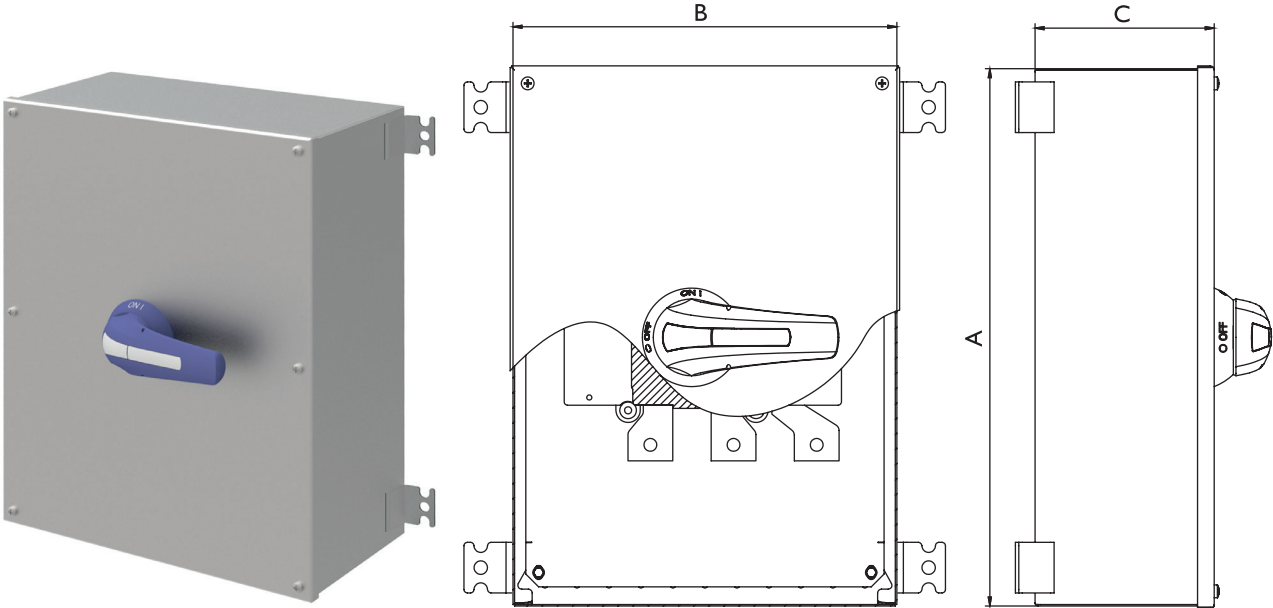
**4P**

Also available 4P switch - disconnectors under request



# iHATHOR SWITCH DISCONNECTOR EMC H2 SERIES

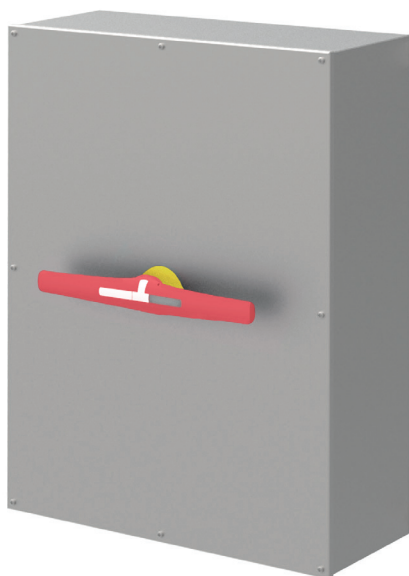
## PLANS AND REFERENCES



EMC H2 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
H500A3PPM	500	400	200	500A	3
H500A4PPM	500	400	200	500A	4
H630A3PPM	500	400	200	630A	3
H630A4PPM	500	400	200	630A	4
H800A3PPM	500	400	200	800A	3
H800A4PPM	500	400	200	800A	4



# iHATHOR SWITCH DISCONNECTOR EMC H3 SERIES



Example

**Rated Breaking Current  
of Up to 8 Times  
the Rated Operational Current**

Switch disconnectors on-load EMC H3 Series, are available from 1000A for 1800A, versions under request on order. Rated breaking current of up to 8 times the rated operational current, with ability to establish and support short circuit currents up to 100kA; uninterrupted duties in extreme tropic and polar conditions, as well electromagnetic environment.



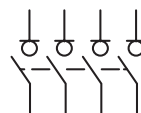
**FOR MORE INFORMATION CLICK HERE**

## TECHNICAL INFORMATION

iHATHOR SWITCH DISCONNECTORS - EMC H3 SERIES					1000	1250	1600	1800
ACCORDING TO IEC/EN 60947-3								
Rated thermal current in ambient at	I <sub>th</sub>	40°C	A		1000	1250	1600	1800
Rated thermal current in ambient at	I <sub>th</sub>	50°C	A		1000	1250	1600	1800
Rated thermal current in ambient at	I <sub>th</sub>	60°C	A		1000	1250	1600	1600
Rated insulation voltage	U <sub>i</sub>		V		1000	1000	1000	1000
Rated impulse withstands voltage	U <sub>imp</sub>		kV		12	12	12	12
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC21A	A	1000	1250	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC22A	A	1000	1250	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 400V	AC23A	A	-	-	1600	1800
AC rated operational current <sup>*(1)</sup>	I <sub>e</sub>	U <sub>e</sub> 800V	AC21B	A	-	-	-	1250
Rated breaking capacity		400V	AC23	A	3000	3750	4800	5400
Rated making capacity		400V	AC23	A	3000	3750	4800	5400
SHORT - CIRCUIT BEHAVIOUR					1000	1250	1600	1800
Rated short-circuit making capacity <sup>*(2)</sup>	I <sub>cm</sub>		kA (beak)		60	60	75	75
Rated short-time withstand current I <sub>s</sub>	I <sub>cw</sub>		kA rms		25	25	50	50
MECHANICAL FEATURES					1000	1250	1600	1800
Number of mechanical operations (according to the standars, for other values please consult)			Cycles		3000	3000	3000	3000
Maximum weight 3P			Kg		18,5	18,5	18,5	18,5
Maximum weight 3P + N			Kg		20,8	20,8	20,8	20,8

<sup>\*(1)</sup> Other voltages and/or utilization categories. Please consult.

<sup>\*(2)</sup> Without limiting protective device (short-circuit maintained 50ms. - 100ms.)

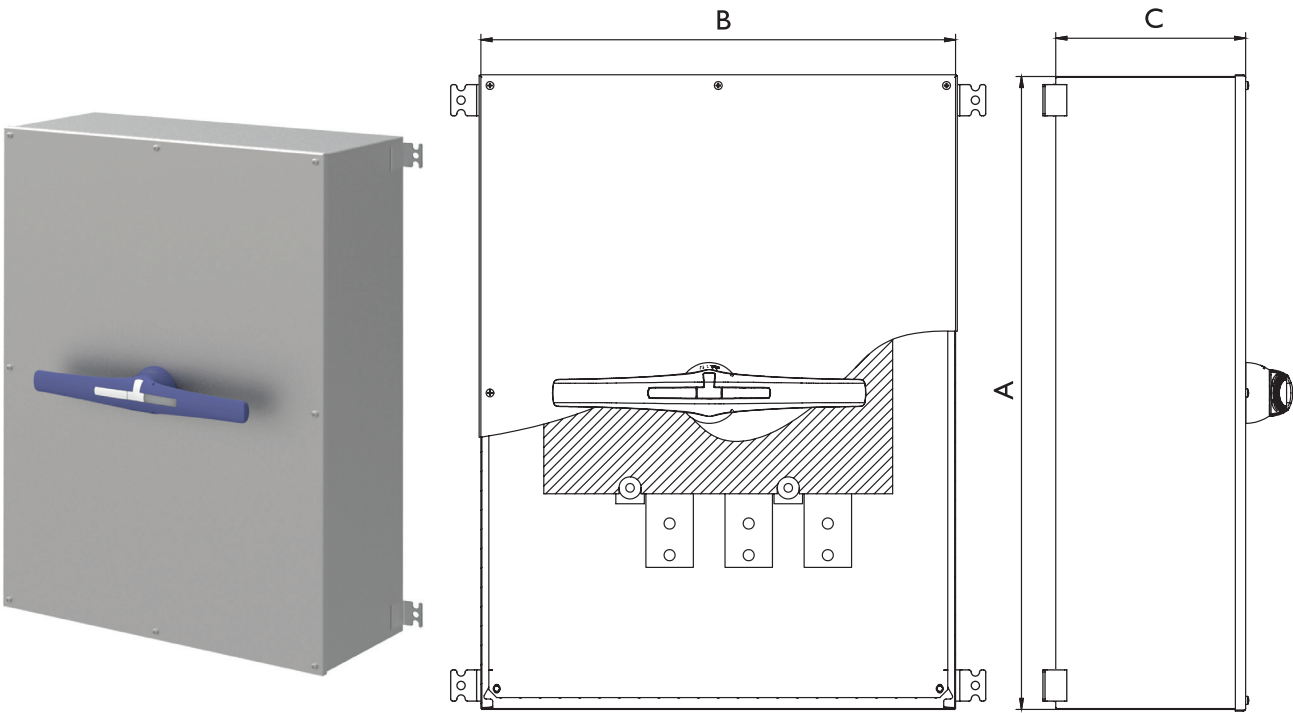


**4P**

Also available 4P switch -  
disconnectors under request

# iHATHOR SWITCH DISCONNECTOR EMC H3 SERIES

## PLANS AND REFERENCES



EMC H3 SERIES	DIMENSIONS (mm)				
REFERENCES	HEIGHT (A)	WIDTH (B)	DEPTH (C)	CURRENT	N° POLES
HI 000A3PPM	600	500	200	I 000A	3
HI 000A4PPM	600	500	200	I 000A	4
HI 250A3PPM	600	500	200	I 250A	3
HI 250A4PPM	600	500	200	I 250A	4
HI 600A3PPM	800	600	250	I 600A	3
HI 600A4PPM	800	600	250	I 600A	4
HI 800A3PPM	800	600	250	I 800A	3
HI 800A4PPM	800	600	250	I 800A	4







## iHATHOR - Safety and Isolation Switches

Specialising in safety switches, isolation switches and disconnectors





## CUSTOMIZED SWITCHES SOLUTIONS iHATHOR

*The customized manufacture of all safety and isolation switches iHATHOR is carry out with the most advanced technical methods and with the precision and consciousness of a craftsman. Therefore, it is not an accident that our company has been present in the market for many years: it is the result of hard work and effort by many people.*

*In iHATHOR we bear in mind that customers perceive the quality very clearly safety and useful solutions are what customers value most. Nowadays we have license to use the most exigents certifications. Our flexible manufacturing environment greatly reduces the costs associated with changeovers and small production lots.*



ATEX SAFETY SWITCHES



UL 98 AND UL 508  
SAFETY SWITCHES



SLOPED ROOF HYGIENIC  
SWITCHES



IECEx SAFETY SWITCHES



EMC SWITCHES  
DISCONNECTORS

CORROSION RESISTANT  
SWITCHES



## WEATHERPROOF AND DUST-TIGHT SWITCHES

Buy direct from manufacturer of custom made IP66 heavy duty industrial and waterproof switches AISI 304L and 316L made by standard IEC 60529. iHATHOR has tested all sizes and dimensions of waterproof enclosures according to EN 60529:2018. All weather resistant enclosures are more than simply rainproof, they meet a minimum of Nema 4X and IP66 requirements to ensure your electronics are protected. From safety switches to disconnectors, iHATHOR weatherproof enclosures offer a wide range of sizes and styles to keep your project waterproof.



CABLE GLANDS  
FOR SAFE AREAS

CABLE GLANDS  
FOR ATEX AREAS





## **HEAVY DUTY SAFETY SWITCHES**



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**Contact us, we will be available at any time**