

ATyS range

ATyS r, ATyS d, ATyS t, ATyS g, ATyS p

from 125 to 3200 A

Accessories

Terminal shrouds

Use

IP2X protection against direct contact with terminals or connecting parts.

Advantages

Perforations allow remote thermographic inspection without the need to remove the shrouds.



acces_206_a_2_cat

Rating (A)	Frame size	No. of poles	Position	Reference
125 … 200	B3	3 P	top / bottom / front (I) / rear (II)	2694 **3014**(1)(2)
125 … 200	B3	4 P	top / bottom / front (I) / rear (II)	2694 **4014**(1)(2)
250 … 400	B4	3 P	top / bottom / front (I) / rear (II)	2694 **3021**(1)(2)
250 … 400	B4	4 P	top / bottom / front (I) / rear (II)	2694 **4021**(1)(2)
500 … 630	B5	3 P	top / bottom / front (I) / rear (II)	2694 **3051**(1)(2)
500 … 630	B5	4 P	top / bottom / front (I) / rear (II)	2694 **4051**(1)(2)

(1) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3.
(2) For top and bottom shrouding for the front only, order quantity 2.

Terminal screens

Use

Upstream and downstream protection against direct contact with terminals or connection parts.

For upstream and downstream protection, order quantity 1.



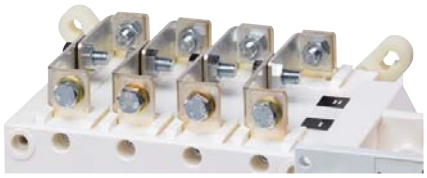
acces_207_a_2_cat

Rating (A)	Frame size	No. of poles	Position	Reference
125 … 200	B3	3 P	top / bottom	1509 **3012**
125 … 200	B3	4 P	top / bottom	1509 **4012**
250 … 400	B4	3 P	top / bottom	1509 **3025**
250 … 400	B4	4 P	top / bottom	1509 **4025**
500 … 630	B5	3 P	top / bottom	1509 **3063**
500 … 630	B5	4 P	top / bottom	1509 **4063**
800 … 1250	B6	3 P	top / bottom	1509 **3080**
800 … 1250	B6	4 P	top / bottom	1509 **4080**
1600	B7	3 P	top / bottom	1509 **3160**
1600	B7	4 P	top / bottom	1509 **4160**
2000 … 3200	B8	3 P	top / bottom	1509 **3200**
2000 … 3200	B8	4 P	top / bottom	1509 **4200**

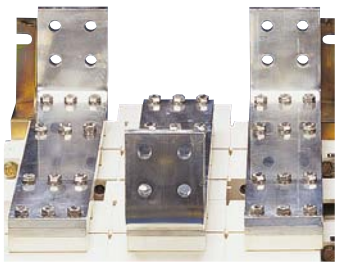
Bridging bars

Use

For bridging power terminals on the upstream or downstream side of the switch.
One reference required per ATyS.



acces_205_a_2_cat



acces_041_a_1_cat

Rating (A)	Frame size	No. of poles	Section (mm)	Reference
125 … 200	B3	3 P	20 x 2.5	4109 **3019**
125 … 200	B3	4 P	20 x 2.5	4109 **4019**
250	B4	3 P	25 x 2.5	4109 **3025**
250	B4	4 P	25 x 2.5	4109 **4025**
315 … 400	B4	3 P	32 x 5	4109 **3039**
315 … 400	B4	4 P	32 x 5	4109 **4039**
500	B5	3 P	32 x 5	4109 **3050**
500	B5	4 P	32 x 5	4109 **4050**
630	B5	3 P	50 x 5	4109 **3063**
630	B5	4 P	50 x 5	4109 **4063**
800 … 1000	B6	3 P	50 x 6	4109 **3080**
800 … 1000	B6	4 P	50 x 6	4109 **4080**
1250	B6	3 P	60 x 8	4109 **3120**
1250	B6	4 P	60 x 8	4109 **4120**
1600	B7	3 P	90 x 10	4109 **3160**
1600	B7	4 P	90 x 10	4109 **4160**

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Copper bar connection pieces

Use

For ratings 2000 to 3200 A.

Enables:

- Flat connection: the connection pieces provide a link between the two power terminals of the same pole (Fig. 1).
- Edgewise connection: the connection pieces provide a link between the two power terminals of the same pole and an edgewise bar connection terminal.
- Top or bottom bridging between two poles (Fig. 3).

Once installed, the power terminal is connection ready.

For 3200 A rating, connection pieces (part A) are supplied as standard. Bolt sets must be ordered separately.

Connection: the quantities given in the below table refer to the number of pieces required per pole, top or bottom.

Bridging connection: the quantities given refer to the number of pieces required to complete a single bridging connection between two poles.

	Reference	2000 – 2500 A			3200 A		
		Fig. 1	Fig. 2	Fig. 3	Fig. 1	Fig. 2	Fig. 3
		Connection		Bridging connection I - II	Connection		Bridging connection I - II
		Flat	Edgewise		Flat	Edgewise	
Connection - part A	2619 **1200**	1	1	2(2)	included	included	included
Bolt kit 35 mm - part B	2699 **1201**	1(1)		2(2)	1(1)		2(2)
Bolt kit 45 mm - part B	2699 **1200**	1(1)			1(1)		
T + Bolt kit - part C	2629 **1200**		1	1		1	1
Bracket + bolt kit - part D	2639 **1200**		1			1	
Bar + bolt kit - part E	4109 **0320**			1			1

(1) Choose the bolt length according to the thickness of the bars being connected; if bar thickness is greater than 20 mm, 45 mm bolts are required.

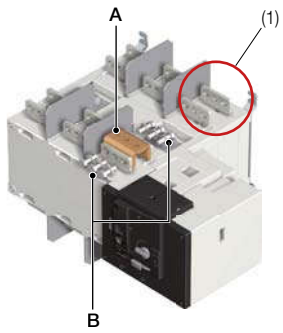
(2) For bridging connections, quantity 2 pieces are required for creating the link between the two power terminals of the same pole for switch bodies I and II.

The quantities of the applicable pieces then need to be multiplied by the number of connection points (power terminals) in order to determine the total quantity required of each part.

Example: For a 4 pole 2500 A SIRCOVER with upstream edgewise connection (Fig. 2) and downstream bridging (Fig. 3), the following quantities will be required:

Part	Upstream edgewise quantity	Downstream bridging quantity	Total quantity
A	8	8	16
B	0	8	8
C	8	4	12
D	8	0	8
E	0	4	4

Fig. 1



(1) Single pole connection: 1 pole (top or bottom) comprises two power terminals which are to be linked with the copper connection kit.

Fig. 2

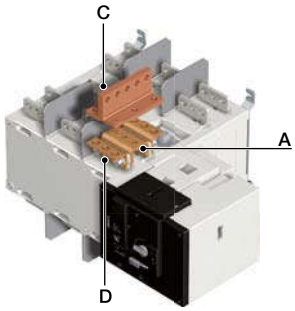
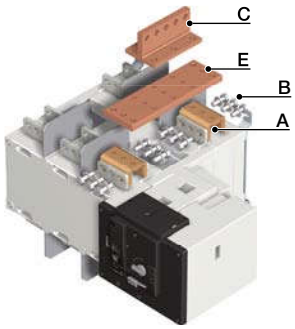


Fig. 3



Solid neutral

Use

The solid neutral kit provides connection between the incoming and outgoing neutrals with no disconnection during transfer.

Rating (A)	Frame size	Reference
125 … 200	B3	9509 **0012**
200 … 315	B4	9509 **0025**
400	B4	9509 **0040**
500 … 630	B5	9509 **0063**
800 … 1000	B6	9509 **0080**
1250	B6	9509 **0120**
1600	B7	9509 **0160**

Accessories (continued)

Autotransformer

Use
For applications without neutral, this autotransformer provides the 230 VAC required to power these ATyS products.

Rating (A)	Frame size	Reference
125 … 3200	B3 … B8	1599 **4064**

DC power supply

Use
Allows an ATyS to be supplied from a 12 or 24 VDC source. To be positioned as close as possible to the DC power supply source.

Rating (A)	Frame size	Operating voltage	Reference
125 … 1600	B3 … B7	12 VDC / 230 VAC	1599 **5012**
125 … 1600	B3 … B7	24 VDC / 230 VAC	1599 **5112**
125 … 1600	B3 … B7	48 VDC / 230 VAC	1599 **5212**

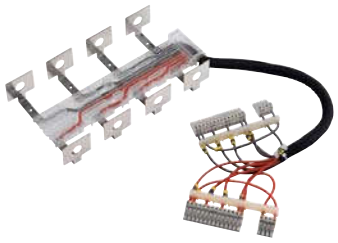
Voltage tapping and power supply kit

Use
For power supply and voltage measurement (4 wire, three-phase) for the ATyS t, g and p. Routing of the conductors is controlled, which means that no specific protective device is necessary for these connections.

The kit can be fitted on the top or bottom of the switch.

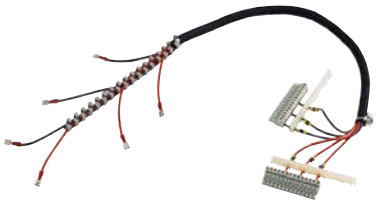
Note: the 3-pole version does not integrate the power supply.

125 to 630 A kit



atys_606_a_1_cat

800 to 3200 A kit



atys_603_a_2_cat

For ATyS t, g and ATyS p - 3 pole		
Rating (A)	**Frame size**	**Reference**
125 … 200	B3	1559 **3012**
250	B4	1559 **3025**
315 … 400	B4	1559 **3040**
500 … 630	B5	1559 **3063**
800 … 1000	B6	1559 **3080**
1250	B6	1559 **3120**
1600	B7	1559 **3160**
2000 … 3200	B8	1559 **3200**

For ATyS t, g and ATyS p - 4 pole		
Rating (A)	**Frame size**	**Reference**
125 … 200	B3	1559 **4012**
250	B4	1559 **4025**
315 … 400	B4	1559 **4040**
500 … 630	B5	1559 **4063**
800 … 1000	B6	1559 **4080**
1250	B6	1559 **4120**
1600	B7	1559 **4160**
2000 … 3200	B8	1559 **4200**

Voltage relay

Use
The DS is a voltage relay for monitoring a single power supply.

If it detects a fault in the source, the default relay contact closes.

Rating (A)	Reference
DS	192X **0056**

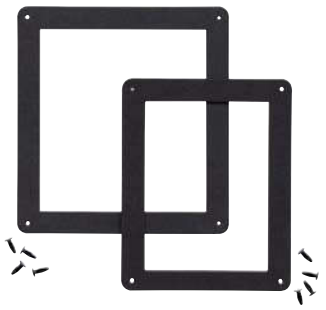


atys_762_a_1_cat

Door protective surround

Use

Door surround to provide a clean and safe finish to the panel's cut-out.



For ATyS

Rating (A)	Frame size	Reference
125 … 630	B3 … B5	1529 **0012**
800 … 3200	B6 … B8	1529 **0080**

For ATyS d, t, g and p

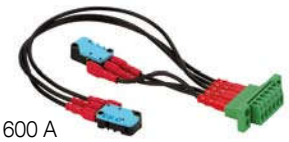
Rating (A)	Frame size	Reference
125 … 630	B3 … B5	1539 **0012**
800 … 3200	B6 … B8	1539 **0080**

Auxiliary contact

Use

Pre-break and signalling of positions I and II: each reference provides 1 NO/NC auxiliary contact for positions I and II. Possibility to install up to 2 auxiliary contacts for each position.

Low level AC: contact us. ATyS are supplied with 1 NO aux contact for all three positions as standard.



800 to 1600 A

If additional auxiliary contacts are required please consult us.



125 to 630 A

Rating (A)	Frame size	Nominal current (A)	Operating current I_e (A) 250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13
125 … 3200	B3 … B8	16	12	8	14	6

Rating (A)	Frame size	Type of mounting	Reference
125 … 630	B3 … B5	Customer fit	1599 **0502**
800 … 1600	B6 … B7	Customer fit	1599 **0532**
2000 … 3200	B8	-	2 AC per position fitted as standard

Mounting spacers

Use

Increases the distance between the rear power terminals and the backplate by 1 cm.

This accessory may also be used to replace the original mounting spacers.



Rating (A)	Frame size	Description of accessories	Reference
125 … 630	B3 … B5	1 set of 2 spacers	1509 **0001**

3 position padlocking (I - 0 - II)

Use

Enables the product to be padlocked in positions 0, I and II (factory fitted).



Rating (A)	Frame size	Reference
125 … 630	B3 … B5	9599 **0003**
800 … 3200	B6 … B8	9599 **0004**

Key handle interlocking system

Use

With the product in manual mode, it enables locking in position 0 using a RONIS EL11AP lock (factory fitted).

As standard, locking in position 0.
With the 3 position padlocking accessory: key interlocking in I, 0 & II.



Rating (A)	Frame size	Reference
125 … 630	B3 … B5	9599 **1006**
800 … 3200	B6 … B8	9599 **1004**

Accessories (continued)

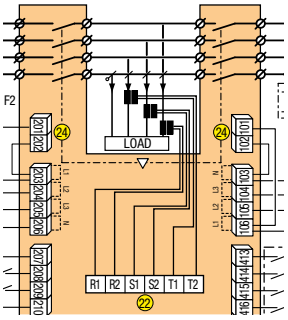
Current transformer

Use - for ATyS p only

Used with ATyS p units, these current transformers enable information to be obtained on the load current.

References

See page 584.



atys_829_c_1_x_cat


trafo_025_a_2_cat


trafo_077_b_1_cat

Plug-in optional modules

Use - for ATyS p only

Number of modules per device

A maximum of four modules can be fitted to each ATyS p, unless you are using either Ethernet communication module. In this case, you can connect up to 2 modules as well as the Ethernet communication module.


atys_016_c_1_cat


diris_447_a_1_cat

RS485 JBUS / MODBUS® communication

- RS485 link with JBUS / MODBUS® protocol (speed up to 38400 bauds).


diris_449_a_1_cat

2 inputs - 2 outputs

- 2 inputs and 2 outputs (programmable) on each module.


diris_777_a_1_cat

Ethernet communication

- Ethernet link with MODBUS/TCP or JBUS/MODBUS RTU over TCP.
- Embedded Ethernet Webserver software.


diris_776_a_1_cat

Ethernet communication with RS485 JBUS/MODBUS gateway

- Ethernet link with MODBUS/TCP or JBUS/MODBUS RTU over TCP.
- Connect 1 to 247 RS485 JBUS/MODBUS slaves.
- Embedded Ethernet Webserver software.


diris_448_a_1_cat

Analogue outputs

- Allocate outputs to: 3I, In, 3V, 3U, F, ± ΣP, ± ΣQ, ΣS.


diris_445_a_1_cat

Pulse outputs

- 2 configurable pulse outputs (type, weight and duration) on ±kWh, ±kvarh and kVAh.

Description of accessories	Reference
RS485 MODBUS communication	4825 **0092**
2 inputs - 2 outputs	1599 **2001**
Ethernet communication (embedded Ethernet Webserver software)	4825 **0203**
Ethernet communication + RS485 JBUS/MODBUS gateway (embedded Ethernet Webserver software)	4825 **0204**
Analogue outputs	4825 **0093**
Pulse outputs	4825 **0090**

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Remote interfaces

Use
To remotely display source availability and position indication typically used on the front of a panel when the product is enclosed.
Interfaces are powered from the ATyS transfer switch via the RJ45 connection cable.
Maximum cable length: 3 m.

D10 - for ATyS d, ATyS t and ATyS g
To display source availability and position indication on the front panel of an enclosure.
Protection degree: IP21

D20 - for ATyS p
In addition to the functions of the D10, the D20 displays measurements and enables control and configuration from the front of a panel.
Protection degree: IP21

Door mounting
2 holes Ø 22.5.
ATyS transfer switch via RJ45 cable, not isolated. Cable available as an accessory.





RJ45 port to connect to ATyS.

Drilling

Description of accessories	Reference
D10	9599 **2010**
D20	9599 **2020**

Connecting cable for remote interfaces

Use
To connect between a remote interface (type D10 or D20) and a control product (ATyS d, t, g or p).

Characteristics
RJ45 8 straight-through, non insulated cables, length 3 m.



For ATyS d, t, g and p		
Type	**Length**	**Reference**
RJ45 cable	3 m	1599 **2009**

Sealable cover

Use - for ATyS t and g
Prevents access to the configuration of ATyS t and g devices (seals supplied).



Rating (A)	Frame size	Reference
125 … 3200	B3 … B8	9599 **0000**

Auto/Manual key selector

Use
Replaces the standard Auto/Manual selector knob with a key selector.

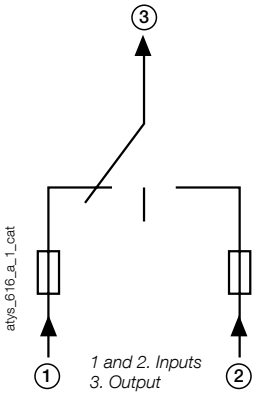


Rating (A)	Frame size	Reference
125 … 3200	B3 … B8	9599 **1007**

Double power supply - DPS

Use
Allows an ATyS r to be supplied by two 230 VAC, 50/60 Hz networks.

Input
- The input is considered “active” from 200 VAC.
- Maximum voltage: 288 VAC.
- Internal protection: each input is fuse protected (3.15 A).
- Connection on terminals: max. 6 mm².
- Modular device: 4 module width.



1 and 2. Inputs
3. Output



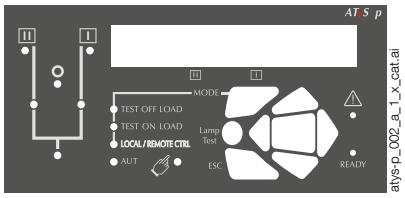
Description of accessories	Reference
DPS	1599 **4001**

Spares

ATyS p front panel

This front panel is used, for the ATyS p only, if source 2 is connected to unit I and source 1 is connected to unit II. Positions I and II are reversed on the front panel.

Product model	Reference
ATyS p	9599 **1008**



atys-p_002_a_1_x_cat.ai

Electronic module

The electrical components of the ATyS d, t, g and p are easy to replace in case there is a problem, even when on-load.

Product model	Reference
ATyS d	9539 **2001**
ATyS t	9549 **2001**
ATyS g	9559 **2001**
ATyS p	9579 **2001**


atys-p_001_b

Motorisation module

The motor units of the ATyS r, d, t, g and p re easy to replace in case there is a problem, even when on-load.

Rating (A)	Reference
125 … 200	9509 **5020**
250 … 400	9509 **5040**
500 … 630	9509 **5063**
800 … 1250	9509 **5120**
1600	9509 **5160**
2000 … 3200	9509 **5320**


atys_871_a

Switching module

If you need to replace just the switching part on an ATyS r, d, t, g or p, order SIRCOVER items.
Please refer to page 396.


svr_151_a

Enclosed solutions

General characteristics

ATyS d and ATyS p

- Adapted to mechanical risk and dust hazard.
- IP rating: IP54.
- Colour: RAL 7035.
- Connecting the cables: upstream or downstream up to 250 A then downstream only.
- The auxiliary contacts are wired to terminal blocks.
- Material: 2 mm-thick XC steel.
- Coating: epoxy varnish.
- Mounting: 4 wall mounting brackets, not mounted ≤ 400 A, floor standing feet > 630 A
- Door: solid with hinges.
- Door lock: 3 mm double-bar lock (key included)

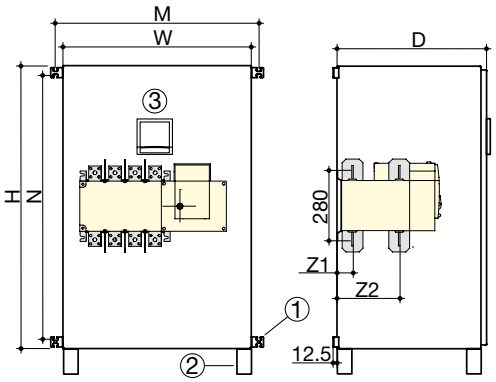


coff_306_b_1

References

Rating (A)	No. of poles	ATyS d Reference	ATyS p Reference
125	4 P	1723 **4012**	1763 **4012**
160	4 P	1723 **4016**	1763 **4016**
250	4 P	1723 **4025**	1763 **4025**
400	4 P	1723 **4040**	1763 **4040**
630	4 P	1723 **4063**	1763 **4063**
800	4 P	1723 **4080**	1763 **4080**
1000	4 P	1723 **4100**	1763 **4100**
1250	4 P	1723 **4120**	1763 **4120**
1600	4 P	1723 **4160**	1763 **4160**
2000	4 P	1723 **4200**	1763 **4200**
2500	4 P	1723 **4250**	1763 **4250**
3200	4 P	1723 **4320**	1763 **4320**

Dimensions



atys_621_c_1_gb_cat

(1) Wall mounting brackets supplied up to 400 A.
(2) Floor standing feet from 630 A (add 200 mm for to H dimension feet).
(3) D10 or D20 interfaces (optional).

Rating (A)	Max. Cu cable cross-section (mm^2)	H (mm)	W (mm)	D (mm)	M (mm)	N (mm)	Z1 (mm)	Z2 (mm)	Weight (kg)
125	50	650	400	300	448	608	38	134	25
160	70	650	400	300	448	608	38	134	25
250	120	1000	650	475	698	958	39.5	134.5	45
400	240	1000	650	475	698	958	39.5	134.5	50
630	2 x 185	1000	650	475			53	190	70
800	2 x 240	1200	800	660			66.5	253.5	135
1000	4 x 150	1200	800	660			66.5	253.5	140
1250	4 x 185	1600	1000	830			66.5	253.5	270
1600	4 x 240	1600	1000	830			67.5	253.5	375
2000	8 x 150	2000	1000	1000					400
2500	8 x 185	2000	1000	1000					400
3200	8 x 240	2000	1000	1000					400

ATyS range

ATyS r, ATyS d, ATyS t, ATyS g, ATyS p

from 125 to 3200 A

Characteristics according to IEC 60947-3 and IEC 60947-6-1

125 to 630 A

Thermal current I_{th} to 40°C		**125 A**	**160 A**	**200 A**	**250 A**	**315 A**	**400 A**	**500 A**	**630 A**
Frame size		**B3**	**B3**	**B3**	**B4**	**B4**	**B4**	**B5**	**B5**
Rated insulation voltage U_i (V) (power circuit)		800	800	800	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV) (power circuit)		8	8	8	12	12	12	12	12
Rated insulation voltage U_i (V) (control circuit)		300	300	300	300	300	300	300	300
Rated impulse withstand voltage U_{imp} (kV) (control circuit)		4	4	4	4	4	4	4	4
Rated operational currents I_e (A) according to IEC 60947-3									
Rated voltage	**Utilisation category**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**
415 VAC	AC-21 A / AC-21 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630
415 VAC	AC-22 A / AC-22 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630
415 VAC	AC-23 A / AC-23 B	125/125	160/160	200/200	200/200	315/315	400/400	500/500	500 /630
500 VAC	AC-21 A / AC-21 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630
500 VAC	AC-22 A / AC-22 B	125/125	160/160	200/200	200/250	200/315	200/400	500/500	500/500
500 VAC	AC-23 A / AC-23 B	80/80	80/80	80/80	200/200	200/200	200/200	400/400	400/400
690 VAC(3)	AC-21 A / AC-21 B	125/125	160/160	200/200	200/200	200/200	200/200	500/500	500/500
690 VAC(3)	AC-22 A / AC-22 B	125/125	125/125	125/125	160/160	160/160	160/160	400/400	400/400
690 VAC(3)	AC-23 A / AC-23 B	63/80	63/80	63/80	125/125	125/125	125/125	400/400	400/400
220 VDC	DC-21 A / DC-21 B	125/125	160/160	200/200	250/250	250/250	250/250	500/500	630/630
220 VDC	DC-22 A / DC-22 B	125/125	160/160	200/200	250/250	250/250	250/250	500/500	630/630
220 VDC	DC-23 A / DC-23 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630
440 VDC (2)	DC-21 A / DC-21 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630
440 VDC (2)	DC-22 A / DC-22 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630
440 VDC (2)	DC-23 A / DC-23 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630
Rated operational currents I_e (A) according to IEC 60947-6-1									
Rated voltage	**Utilisation category**								
415 VAC	AC-31 B	125	160	200	250	315	400	500	630
415 VAC	AC-32 B				200	315	400	500	500
415 VAC	AC-33 B				200	200	200	400	400
Current rated as conditional short-circuit with fuse gG DIN, according to IEC 60947-3									
Prospective fuse protected short-circuit withstand at 415 VAC(6)		100	100	50	50	50	50	50	50
Prospective fuse protected short-circuit withstand at 690 VAC(kA rms)					50	50	50	50	50
Associated fuse rating (A)		125	160	200	250	315	400	500	630
Short-circuit withstand without protection as per IEC 60947-3									
Rated short-time withstand current 0.3s I_{cw} at 415 VAC (kA rms)		12	12	12	15 (4)	15 (4)	15 (4)	17 (4)	17 (4)
Rated short-time withstand current 1s I_{cw} at 415 VAC (kA rms)		7	7	7	8 (4)	8 (4)	8 (4)	11 (4)	10 (4)
Rated peak withstand current at 415 VAC (kA peak)		20	20	20	30	30	30	45	45
Short-circuit withstand without protection as per IEC 60947-6-1									
Rated short-time withstand current 30 ms I_{cw} at 415 VAC (kA rms)		10	10	10	10	10	10		
Rated short-time withstand current 60 ms I_{cw} at 415 VAC (kA rms)								10	12.6
Connection									
Minimum Cu cable cross-section as per IEC 60947-1 (mm^2)		35	35	50	95	120	185	2 x 95	2 x 120
Recommended Cu busbar cross-section (mm^2)								2 x 32 x 5	2 x 40 x 5
Maximum Cu cable cross-section (mm^2)		50	95	120	150	240	240	2 x 185	2 x 300
Maximum Cu busbar width (mm)		25	25	25	32	32	32	50	50
Min./max. tightening torque (Nm)		9/13	9/13	9/13	20/26	20/26	20/26	40/45	40/45
Switching time (rated voltage, after receiving command)									
Transfer time I-II or II-I (s)		0.85	0.85	0.85	0.9	0.9	0.9	0.95	0.95
I-0 or II-0 (s)		0.55	0.55	0.55	0.5	0.5	0.5	0.55	0.55
Contact transfer time ("black-out" I-II) minimum (s)		0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Power supply									
Min./max. power (VAC)		166/332	166/332	166/332	166/332	166/332	166/332	166/332	166/332
Control supply power demand									
Demand/rated power (VA) - ATyS r, ATyS d		184/92	184/92	184/92	276/115	276/115	276/115	276/150	276/150
Demand/rated power (VA) - ATyS t, g , p		206/114	206/114	206/114	298/137	298/137	298/137	298/172	298/172
Mechanical specifications									
Durability (number of operating cycles)		10,000	10,000	10,000	8,000	8,000	8,000	5,000	5,000
Weight ATyS r 3 P / 4 P (kg)		5.7/ 6.9	5.7/ 6.9	5.7/ 6.9	6.6/ 7.4	6.7/ 7.8	6.7/ 7.8	11.4/ 13.3	11.9/ 14.0
Weight ATyS d 3 P / 4 P (kg)		6.3/ 7.5	6.3/ 7.5	6.3/ 7.5	7.2/ 8.0	7.3/ 8.4	7.3/ 8.4	12.0/ 13.9	12.5/ 14.6
Weight ATyS t, g, p 3 P / 4 P (kg)		6.8/ 8.0	6.8/ 8.0	6.8/ 8.0	7.7/ 8.5	7.8/ 8.9	7.8/ 8.9	12.5/ 14.4	13.0/ 15.1

(1) Category with index A = frequent operation - Category with index B = infrequent operation.
(2) 3-pole device with 2 pole in series for the "+" an 1 pole for the "-".
4-pole device with 2 poles in series by polarity.
(3) Interphase barriers must be installed on the products.
(4) Values given at 690 VAC.

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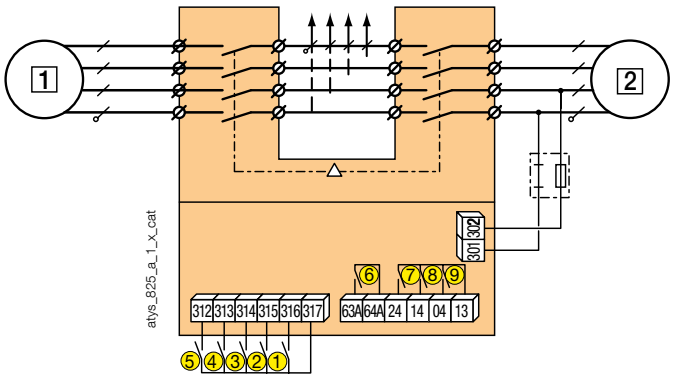
800 to 3200 A

Thermal current I_{th} at 40°C		**800 A**	**1000 A**	**1250 A**	**1600 A**	**2000 A**	**2500 A**	**3200 A**
Frame size		**B6**	**B6**	**B6**	**B7**	**B8**	**B8**	**B8**
Rated insulation voltage U_i (V) (power circuit)		1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV) (power circuit)		12	12	12	12	12	12	12
Rated insulation voltage U_i (V) (control circuit)		300	300	300	300	300	300	300
Rated impulse withstand voltage U_{imp} (kV) (control circuit)		4	4	4	4	4	4	4
Rated operational currents I_e (A) according to IEC 60947-3								
Rated voltage	**Utilisation category**	**A/B[1]**	**A/B[1]**	**A/B[1]**	**A/B[1]**	**A/B[1]**	**A/B[1]**	**A/B[1]**
415 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200
415 VAC	AC-22 A / AC-22 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200
415 VAC	AC-23 A / AC-23 B	800/800	1000/1000	1250/1250	1250/1250	-/1600	-/1600	-/1600
500 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000
500 VAC	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1600/1600			
500 VAC	AC-23 A / AC-23 B	630/630	630/630	800/800	1000/1000			
690 VAC[3]	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000
690 VAC[3]	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1000/1000			
690 VAC[3]	AC-23 A / AC-23 B	630/630	630/630	800/800	800/800			
220 VDC	DC-21 A / DC-21 B	800/800	1000/1000	1250/1250	1250/1250			
220 VDC	DC-22 A / DC-22 B	800/800	1000/1000	1250/1250	1250/1250			
220 VDC	DC-23 A / DC-23 B	800/800	1000/1000	1250/1250	1250/1250			
440 VDC [2]	DC-21 A / DC-21 B	800/800	1000/1000	1250/1250	1250/1250			
440 VDC [2]	DC-22 A / DC-22 B	800/800	1000/1000	1250/1250	1250/1250			
440 VDC [2]	DC-23 A / DC-23 B	800/800	1000/1000	1250/1250	1250/1250			
Rated operational currents I_e (A) according to IEC 60947-6-1								
Rated voltage	**Utilisation category**							
415 VAC	AC-31 B	800	1000	1250	1600	2000	2500	3200
415 VAC	AC-32 B	800	1000	1250	1250	2000	2000	2000
415 VAC	AC-33 B	800	1000	1000	1000	1250	1250	1250
Current rated as conditional short-circuit with fuse gG DIN, according to IEC 60947-3								
Prospective fuse protected short-circuit withstand at 415 VAC(kA rms)		50	50	100	100			
Prospective fuse protected short-circuit withstand at 690 VAC(kA rms)		50	50	50				
Associated fuse rating (A)		800	1000	1250	2x800			
Short-circuit withstand without protection as per IEC 60947-3								
Rated short-time withstand current 0.3s I_{cw} at 415 VAC (kA rms)		64	64	64	78	78	78	78
Rated short-time withstand current 1s I_{cw} at 415 VAC (kA rms)		35	35	35	50	50	50	50
Rated peak withstand current at 415 VAC (kA peak)		55	55	80	110	120	120	120
Short-circuit withstand without protection as per IEC 60947-6-1								
Rated short-time withstand current 30 ms I_{cw} at 415 VAC (kA rms)								
Rated short-time withstand current 60 ms I_{cw} at 415 VAC (kA rms)		20	20	25	32	50	50	50
Connection								
Minimum Cu cable cross-section as per IEC 60947-1 (mm^2)		2 x 185						
Recommended Cu busbar cross-section (mm^2)		2 x 50 x 5	2 x 63 x 5	2 x 60 x7	2 x 100 x 5	3 x 100 x 5	2 x 100 x 10	3 x 100 x 10
Maximum Cu cable cross-section (mm^2)		4 x 185	4 x 185	4 x 185	6 x 185			
Maximum Cu busbar width (mm)		63	63	63	100	100	100	100
Min./max. tightening torque (Nm)		9/13	9/13	20/26	40/45	40/45	40/45	40/45
Switching time (rated voltage, after receiving command)								
Transfer time I-II or II-I (s)		2.8	2.8	2.8	2.9	2.8	2.8	2.8
I-0 or II-0 (s)		1.4	1.4	1.4	1.4	1.8	1.8	1.8
Contact transfer time ("black-out" I-II) minimum (s)		1.4	1.4	1.4	1.5	1	1	1
Power supply								
Min./max. power (VAC)		166/332	166/332	166/332	166/332	166/332	166/332	166/332
Control supply power demand								
Demand/rated power (VA) - ATyS r, ATyS d		460/184	460/184	460/184	460/230	812/322	812/322	812/322
Demand/rated power (VA) - ATyS t, g , p		482/206	482/206	482/206	482/252	834/344	834/344	834/344
Mechanical specifications								
Durability (number of operating cycles)		4,000	4,000	4,000	3,000	3,000	3,000	3,000
Weight ATyS r 3 P / 4 P (kg)		27.9/ 32.2	28.4/ 32.9	28.9/ 33.6	33.1/ 39.4	50.7/ 61.6	50.7/ 61.6	61.0/ 75.3
Weight ATyS d 3 P / 4 P (kg)		28.5/ 32.8	29.0/ 33.5	29.5/ 34.2	33.7/ 40.0	51.3/ 62.2	51.3/ 62.2	61.6/ 75.9
Weight ATyS t, g, p 3 P / 4 P (kg)		29.0/ 33.3	29.5/ 34.0	30.0/ 34.7	34.2/ 40.5	51.8/ 62.7	51.8/ 62.7	62.1/ 76.4

(1) Category with index A = frequent operation - Category with index B = infrequent operation.
(2) 3-pole device with 2 pole in series for the "+" an 1 pole for the "-".
4-pole device with 2 poles in series by polarity.
(3) Interphase barriers must be installed on the products.
(4) Values given at 690 VAC.

Connections and terminals

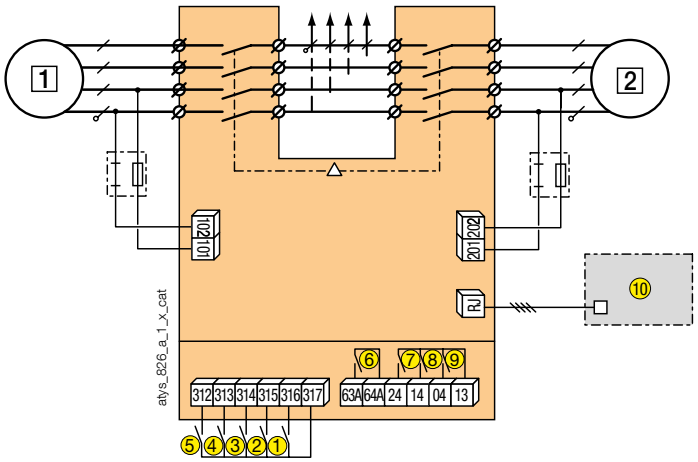
ATyS r



1 primary source (network or genset)
2 backup source (mains network or genset)

1 : position 0 control (contact or logic if closed)
2: position I control
3: position II control
4: primary control position 0
5: closing this contact allows position control commands
6: product availability relay
7: auxiliary contact - closed when the switch is in position II
8: auxiliary contact - closed when ther switch is in position I
9: auxiliary contact - closed when the switch is in position 0

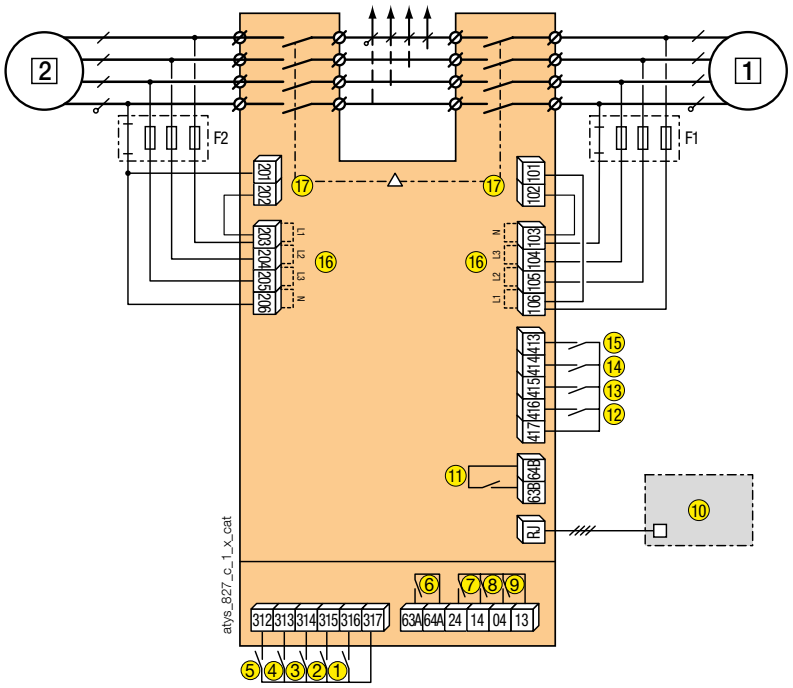
ATyS d



1 primary source (mains network or genset)
2 backup source (mains network or genset)

1 : position 0 control (contact or logic if closed)
2: position I control
3: position II control
4: primary control position 0
5: closing this contact allows position control commands
6: product availability relay
7: auxiliary contact - closed when the switch is in position II
8: auxiliary contact - closed when the switch is in position I
9: auxiliary contact - closed when the switch is in position 0
10: D10 remote interface

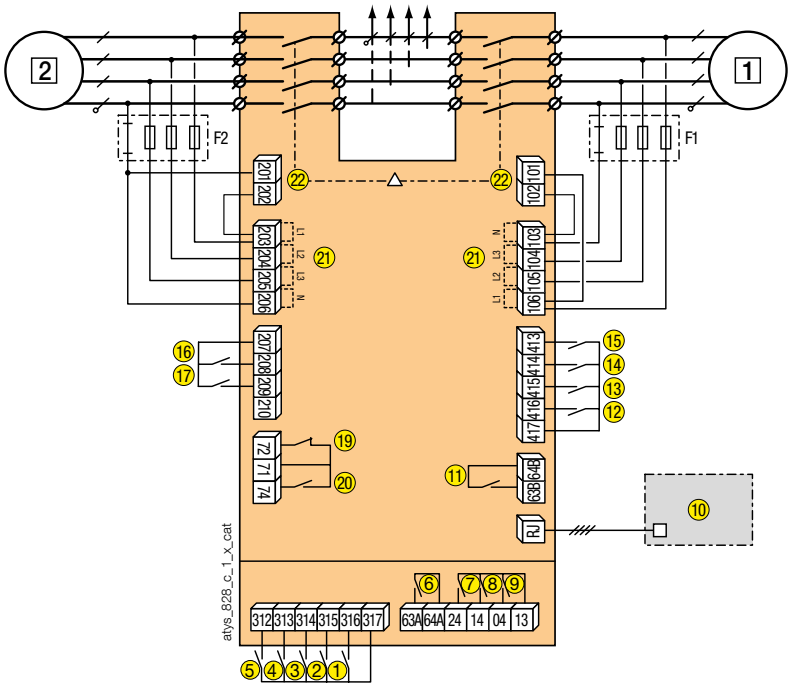
ATyS t



1 primary source (mains network)
2 backup source (mains)

1: position 0 control (contact or logic if closed)
2: position I control
3: position II control
4: primary control position 0
5: closing this contact allows position control commands
6: Motor unit availability relay
7: auxiliary contact - closed when the switch is in position II
8: auxiliary contact - closed when the switch is in position I
9: auxiliary contact - closed when the is in position 0
10: D10 remote interface
11: Electrical unit availability relay
12: automatic operation inhibited
13: confirm manual retransfer
14: preferred source selection
15: function with or without priority
16: voltage inputs
17: power inputs

ATyS g



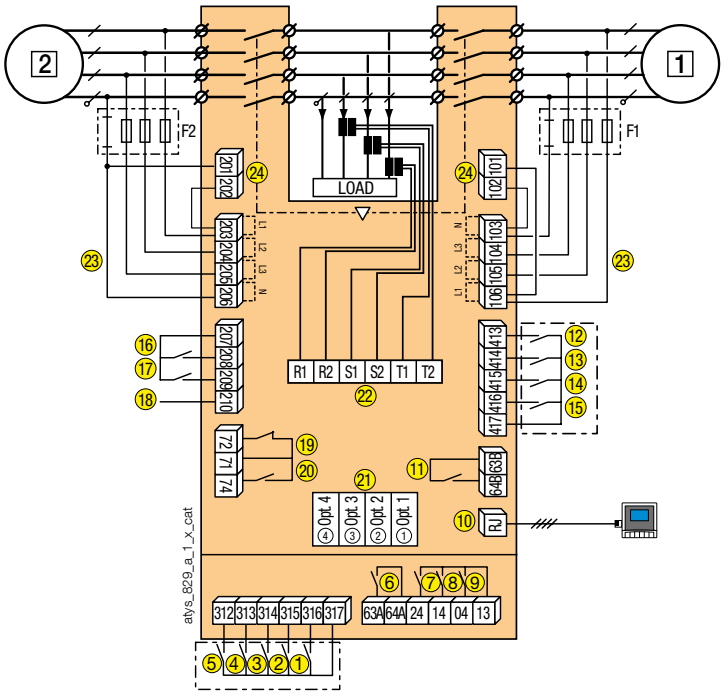
1 primary source (mains network)
2 backup source (genset or network)
1: position 0 control (contact or logic if closed)
2: position I control
3: position II control
4: primary control position 0
5: closing this contact allows position control commands
6: Motor unit availability relay
7: auxiliary contact - closed when the switch is in position II
8: auxiliary contact - closed when the switch is in position I
9: auxiliary contact - closed when the switch is in position 0
10: D10 remote interface
11: Electrical unit availability relay
12: automatic operation inhibited
13: confirm manual retransfer
14 : bypass for time delay 2AT
15 : M/G: priority test on load.
M/M: with or without priority.
16: remote test without load
17 : M/G: test on load
M/M: preferred source selection
19-20: genset start and stop commands

Order	71/72 (19)	71/74 (20)
Genset start-up	Closed contact	Open contact
Genset stop	Open contact	Closed contact

21 : voltage inputs

22: power inputs

ATyS p



1 primary source (network or genset)
2 backup source (network or genset)
1: position 0 control (contact or logic if closed)
2: position I control
3: control position II
4: primary control position 0
5: closing this contact allows position control commands
6: Motor unit availability relay
7: auxiliary contact - closed when the switch is in position II
8: auxiliary contact - closed when the switch is in position I
9: auxiliary contact - closed when the switch is in position 0
10: D20 remote interface
11: Electrical unit availability relay
12-17: programmable inputs
18: auxiliary power supply for optional modules
19-20: genset start and stop commands

Order	71/72 (19)	71/74 (20)
Genset start-up	Closed contact	Open contact
Genset stop	Open contact	Closed contact

21 : 4 slots for optional modules
22: TI measurement connection
23 : voltage inputs
24: power inputs

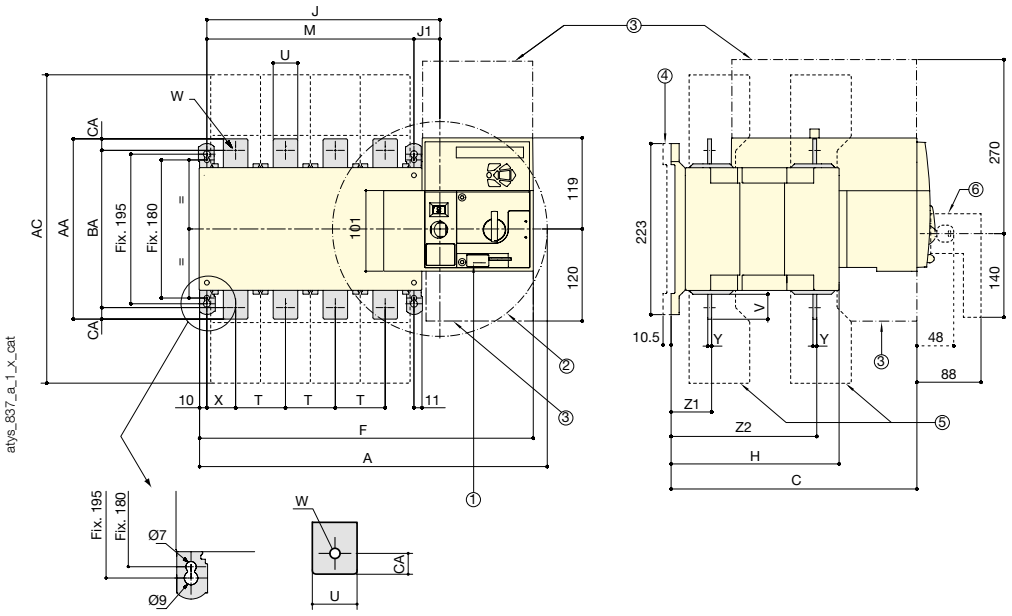
ATyS range

ATyS r, ATyS d, ATyS t, ATyS g, ATyS p

from 125 to 3200 A

Dimensions

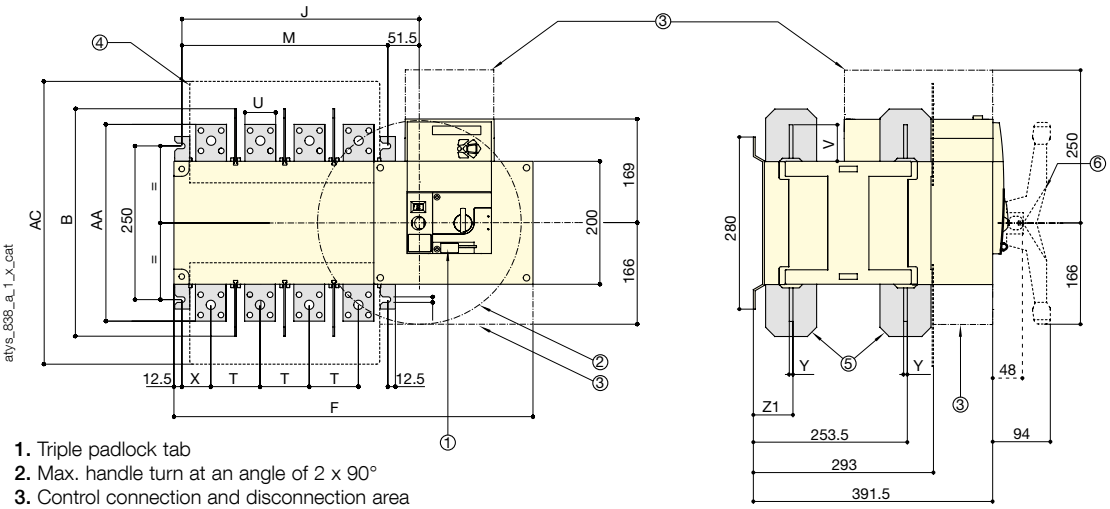
125 to 630 A / B3 to B5



1. Triple padlock tab
2. Max. handle turn at an angle of 2 x 90°
3. Control connection and disconnection area
4. Spacers
5. Terminal shrouds
6. Handle

Rating (A) / Frame size	Overall dimensions			Terminal shrouds	Switch body						Switch mounting		Connection										
	A 3p.	A 4p.	C	AC	F 3p.	F 4p.	H	J 3p.	J 4p.	J1	M 3p.	M 4p.	T	U	V	W	X 3p.	X 4p.	Y	Z1	Z2	AA	BA	AC
125 / B3	304	334	244	233	286.5	317	151	154	184	34	120	150	36	20	25	9	28	22	3.5	38	134	135	115	10
160 / B3	304	334	244	233	286.5	317	151	154	184	34	120	150	36	20	25	9	28	22	3.5	38	134	135	115	10
200 / B3	304	334	244	233	286.5	317	151	154	184	34	120	150	36	20	25	9	28	22	3.5	38	134	135	115	10
250 / B4	345	395	244	288	328	378	152	195	245	35	160	210	50	25	30	11	33	33	3.5	39.5	133.5	160	130	15
315 / B4	345	395	244	288	328	378	152	195	245	35	160	210	50	35	35	11	33	33	3.5	39.5	133.5	170	140	15
400 / B4	345	395	244	288	328	378	152	195	245	35	160	210	50	35	35	11	33	33	3.5	39.5	133.5	170	140	15
500 / B5	394	454	320.5	402	377	437	221	244	304	34	210	270	65	32	50	14	42.5	37.5	5	53	190	260	220	15
630 / B5	394	454	320.5	402	377	437	221	244	304	34	210	270	65	45	50	13	42.5	37.5	5	53	190	260	220	20

800 to 1600 A / B6 to B7

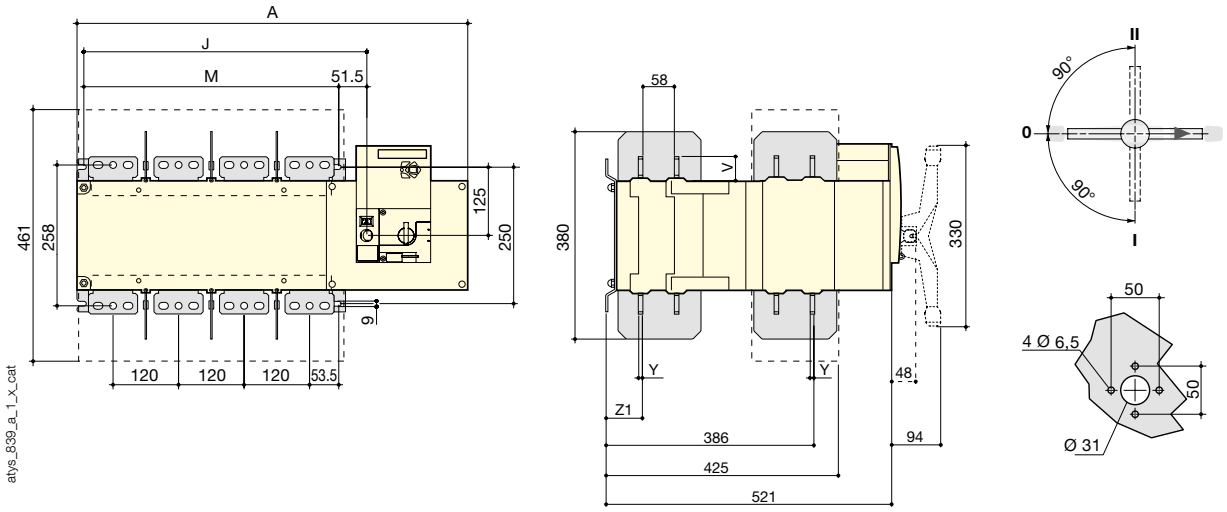


1. Triple padlock tab
2. Max. handle turn at an angle of 2 x 90°
3. Control connection and disconnection area
4. Terminal screens
5. Inter-phase screen
6. Handle

Rating (A) / Frame size	Overall dimensions	Terminal shrouds	Switch body				Switch mounting		Connection						
	B	AC	F 3p.	F 4p.	J 3p.	J 4p.	M 3p.	M 4p.	T	U	V	X	Y	Z1	AA
800 / B6	370	461	504	584	306.5	386.5	255	335	80	50	60.5	47.5	7	66.5	321
1000 / B6	370	461	504	584	306.5	386.5	255	335	80	50	60.5	47.5	7	66.5	321
1250 / B6	370	461	504	584	306.5	386.5	255	335	80	60	65	47.5	7	66.5	330
1600/B7	380	531	596	716	398.5	518.5	347	467	120	90	44	53	8	67.5	288

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2000 to 3200 A / B8

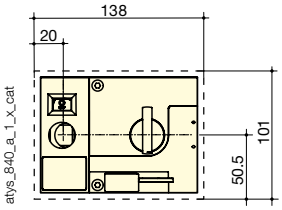


Rating (A)	Overall dimensions B	Terminal shrouds AC	Switch body				Switch mounting		Connection						
			A 3p.	A 4p.	J 3p.	J 4p.	M 3p.	M 4p.	T	U	V	X	Y	Z1	AA
2000 ... 3200	380	531	596	716	399	519	347	467	120	90	44	53	8	67.5	288

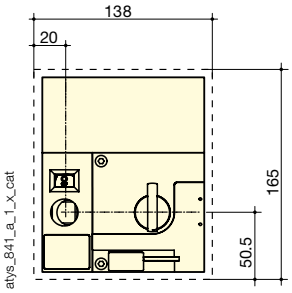
Door cutout

125 to 630 A / B3 to B5

ATyS r

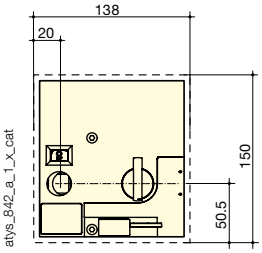


ATyS d, t, g, p

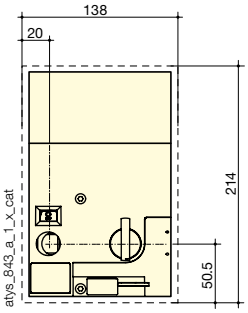


800 to 1600 A / B6 to B7

ATyS r

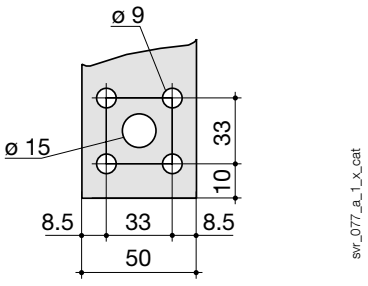


ATyS d, t, g, p

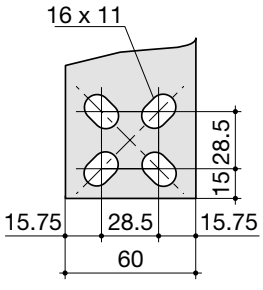


Connection terminals

800 to 1000 A / B6



1250 A / B6



1600 to 3200 A / B7 to B8

