

ATyS UL 1008

Non-automatic Transfer Switching Equipment

from 100 to 1200 A



The solution for

- Standby power builders
- OEM/Machine Builders
- Industrial Control Panels Manufacturers (UL 508A)
- Switchboards Manufacturers (UL 891)
- Distributors



Strong points

- Robust and reliable design
- Compatible with virtually any ATS controller
- On-load manual operation
- Maintenance free

Conformity to standards

- UL 1008 guide WPYV File 317092
- IEC 60947-6-1

Your choice of ATS controls

- The Socomec's ATyS C66 or your preferred brand of ATS controller, genset/AMF controller or power/building management system, may easily be paired with the ATyS to provide a complete automatic transfer switch that perfectly suits your needs.

Function

ATyS non-automatic transfer switches are designed for use in total system optional standby applications for the safe transfer between a normal and an alternate power source.

The changeover is done in open transition and with minimum supply interruption during transfer ensuring full compliance with UL 1008. The ATyS is a full on-load disconnector where the main components are based on proven technology also meeting requirements in UL 98 and IEC 60947-3 standards.

Advantages

Robust and Reliable design

ATyS is a remotely operated transfer switch tested in full compliance with UL 1008. The design integrates a failsafe mechanical interlock to ensure that the main source is never inadvertently connected to the alternate. The stable position design ensures that the switch is unaffected by vibration or network voltage perturbation. The ATyS also includes a removable handle for on load manual operation. This is extremely safe and easy to use. The ATyS also includes a fully rated switched neutral pole.

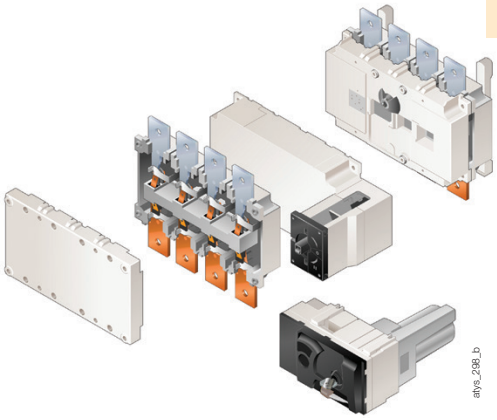
Maintenance free

The self-cleaning contacts of the ATyS allow the power section to be maintenance free. For safe downstream maintenance the ATyS includes a facility for isolation and padlocking in the zero position.

In the unlikely event of a motorization failure, the ATyS is designed in a way that the motorization can be replaced easily and very quickly. Furthermore, the ATyS remains manually operational with or without the motorization in place.

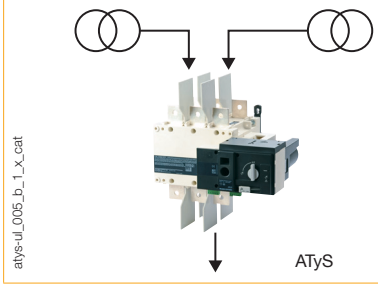
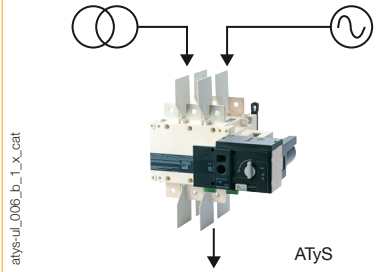
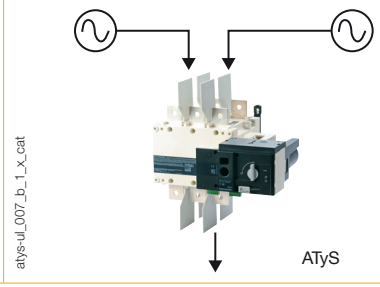
Compatible with virtually any ATS controls

The ATyS is directly compatible with virtually any transfer switching control solution that provides volt free contacts. This allows the ATyS to be combined with most ATS controls available on the market and then used in automatic transfer switch applications.



Typical applications

The ATyS UL 1008 range provides safe transfer for mains/mains, mains/genset and genset/genset applications.

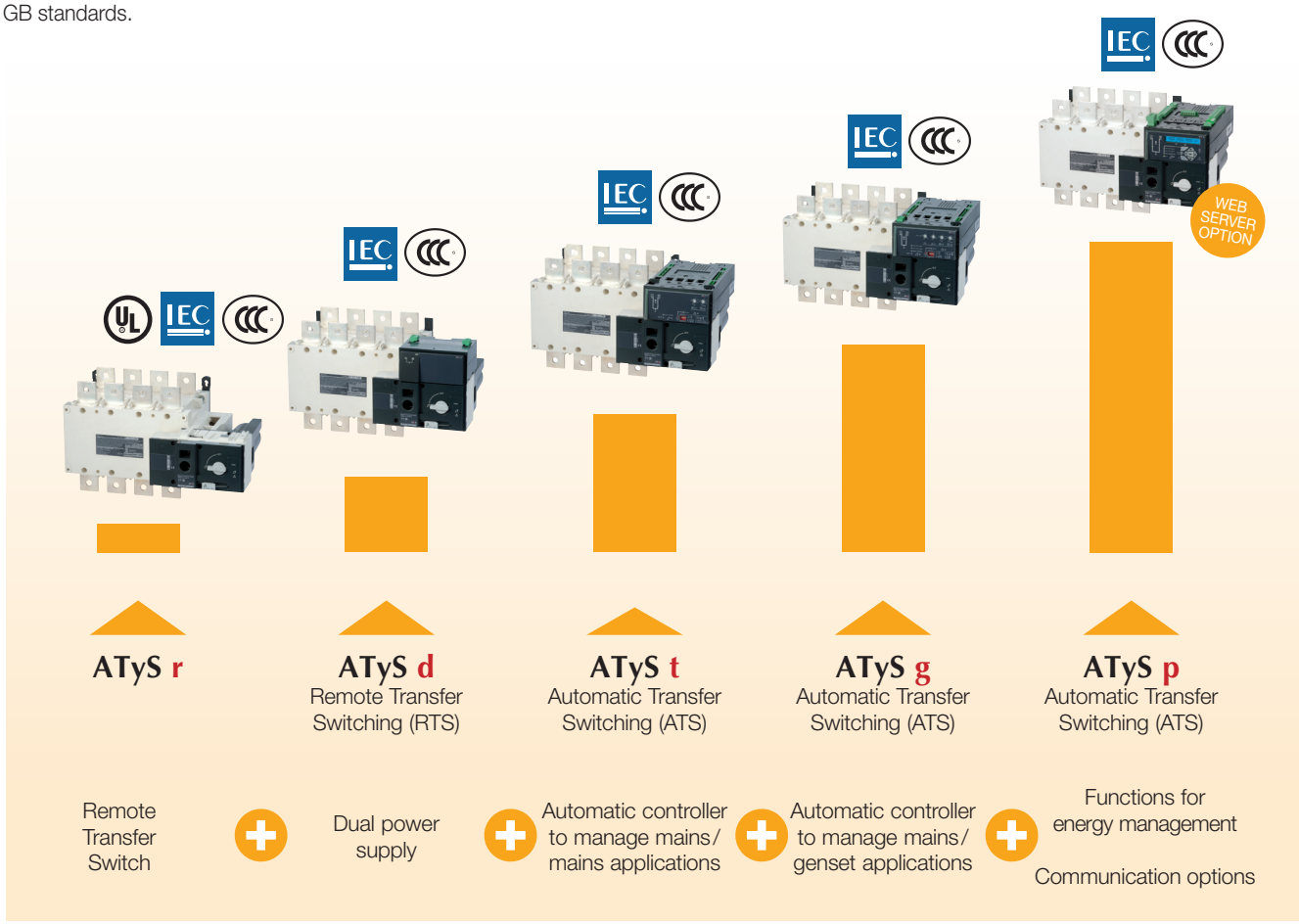
Mains / Mains	Mains / Genset	Genset / Genset
		

Part of a globally recognized range

The ATyS UL 1008 is part of a large family of products including a complete range of remotely operated and fully automatic transfer switches that comply to IEC and GB standards.

The ATyS range is a world renowned product family trusted by some of the largest manufacturers in the genset industry.

The key to success has been through reliable power availability provided by products that are safe and easy to use.



Please don't hesitate to contact SOCOMEC with any questions regarding the IEC ATyS range of products above rated from 125 to 3200 A.

ATyS UL 1008

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from 100 to 1200 A

References

ATYS UL 1008

Rating (A)	Frame size	No. of poles	ATyS	Bridging bars	Terminal screens	Auxiliary contact	Lug kits
100 A	B4	2 P	9723 **2010**	2 P 4159 **2021** 3 P 4159**3021** 4 P 4159 **4021**	2/3 P 4158 **3021** 4 P 4158 **4021**	NO/NC 4159 **0021** Low level 4159 **0022**	2 P 3954 **2020** 3 P 3954 **3020** 4 P 3954 **4020**
		3 P	9723 **3010**				
		4 P	9723 **4010**				
200 A		2 P	9723 **2020**				
		3 P	9723 **3020**				
		4 P	9723 **4020**				
260 A	B5	2 P	9723 **2026**	2 P 4159 **2041** 3 P 4159**3041** 4 P 4159 **4041**	2 / 3 P 4158 **3041** 4 P 4158 **4041**		2 P 3954 **2040** 3 P 3954 **3040** 4 P 3954 **4040**
		3 P	9723 **3026**				
		4 P	9723 **4026**				
400 A		2 P	9723 **2040**				
		3 P	9723 **3040**				
		4 P	9723 **4040**				
600 A	B6	3 P	9723 **3060**	4159 **3063**	1609 **3063**		3954 **3060**
		4 P	9723 **4060**	4159 **4063**	1609 **4063**		3954 **4060**
800 A	B7	3 P	9723 **3080**	3 P 4159 **3080** 4 P 4159 **4080**	3 P 1609 **3080** 4 P 1609 **4080**	Contact NO/NC as standard	3 P 3954 **3120** 4 P 3954 **4120**
		4 P	9723 **4080**				
1200 A		3 P	9723 **3120**				
		4 P	9723 **4120**				

Common accessories - more available on next pages.

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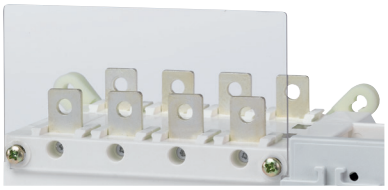
Accessories

Terminal screens

Rating (A)	No. of poles	Reference
100 ... 200	2/3 P	4158 **3021**
100 ... 200	4 P	4158 **4021**
260 ... 400	2/3 P	4158 **3041**
260 ... 400	4 P	4158 **4041**
600	3 P	1609 **3063**
600	4 P	1609 **4063**
800 ... 1200	3 P	1609 **3080**
800 ... 1200	4 P	1609 **4080**

Use

Each part number includes top and bottom protection against direct contact with terminals or connecting parts.



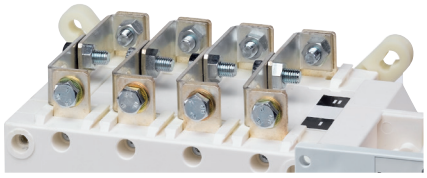
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Bridging bars

Rating (A)	No. of poles	Reference
100 ... 200	2 P	4159 **2021**
100 ... 200	3 P	4159 **3021**
100 ... 200	4 P	4159 **4021**
260 ... 400	2 P	4159 **2041**
260 ... 400	3 P	4159 **3041**
260 ... 400	4 P	4159 **4041**
600	3 P	4159 **3063**
600	4 P	4159 **4063**
800 ... 1200	3 P	4159 **3080**
800 ... 1200	4 P	4159 **4080**

Use

For bridging power terminals on the top or bottom side of the switch. When ordering one reference is required per switch. Please check numbers of poles needed.



acces_205_a_2_cat

Auxiliary contacts

Use

Pre-break and signalling of positions I and II: each reference provides 1 NO/NC auxiliary contact for positions I and II.
ATyS are supplied with 1 NO auxiliary contact for all three positions as standard.

Rating (A)	Contact (s)	Reference
100 ... 400	NO/NC on position 1 and 2	4159 **0021**
100 ... 400	Low level NO/NC on position 1 and 2	4159 **0022**
600 ... 1200	NO/NC on position 1 and 2	as standard

A maximum of 2 Aux contacts per position may be added.



acces_065_a_1_cat



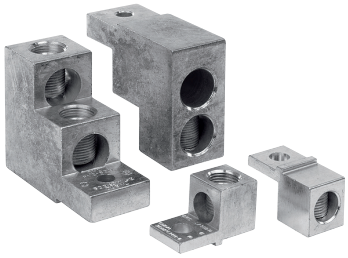
acces_065_a_1_cat

Terminal lugs

Use

Connection of bare copper cables onto the terminals (without lugs).

Rating (A)	Wires range	No wires per lug	Lugs per kit	Wires	Reference
100 ... 200	6 - 300MCM	1	2	Cu / Al	3954 **2020**
100 ... 200	6 - 300MCM	1	3	Cu / Al	3954 **3020**
100 ... 200	6 - 300MCM	1	4	Cu / Al	3954 **4020**
260 ... 400	4 - 600MCM	1	2	Cu / Al	3954 **2040**
260 ... 400	4 - 600MCM	1	3	Cu / Al	3954 **3040**
260 ... 400	4 - 600MCM	1	4	Cu / Al	3954 **4040**
600	2x (#2 - 600MCM)	2	3	Cu / Al	3954 **3060**
600	2x (#2 - 600MCM)	2	4	Cu / Al	3954 **4060**
800 ... 1200(1)	2x 2x(#2 - 600MCM)	2	6	Cu / Al	3954 **3120**
800 ... 1200(1)	2x 2x(#2 - 600MCM)	2	8	Cu / Al	3954 **4120**



ul_032_a

(1) To be used to connect 4 wires on one terminal. In such a case, 2 lugs are placed side-by-side on one terminal. Please refer to dimensions diagram

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Spares

Motorization module

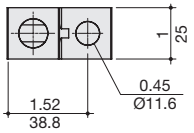
Rating (A)	No. of poles	Frame size	Used for ATyS reference	Motorization module References
100	2 / 3 / 4 P	B4	9723 **2010** - 9723 **3010** - 9723 **4010**	9709 **5010**
200	2 / 3 / 4 P		9723 **2020** - 9723 **3020** - 9723 **4020**	9709 **5020**
260	2 / 3 / 4 P	B5	9723 **2026** - 9723 **3026** - 9723 **4026**	9709 **5026**
400	2 / 3 / 4 P		9723 **2040** - 9723 **3040** - 9723 **4040**	9709 **5040**
600	3 / 4 P	B6	9723 **3060** - 9723 **4060**	9709 **5060**
800	3 / 4 P	B7	9723 **3080** - 9723 **4080**	9709 **5080**
1200	3 / 4 P		9723 **3120** - 9723 **4120**	9709 **5120**

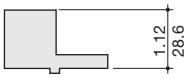


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Terminal lugs (in/mm)

100 and 200 A / B4

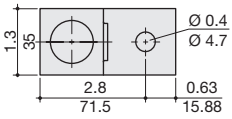


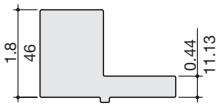


300 kcmil

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260 and 400 A / B5

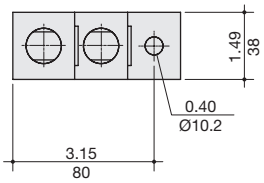


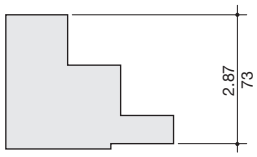


600 kcmil

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600 to 1200 A / B6 - B7



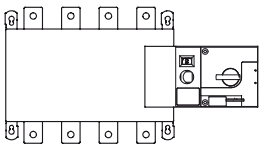
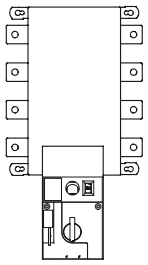
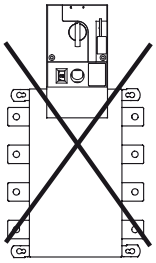
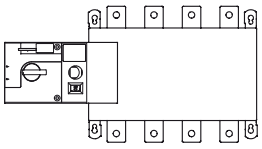


2 x 600 kcmil

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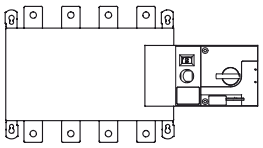
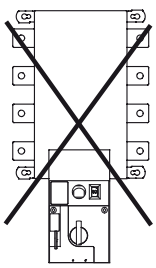
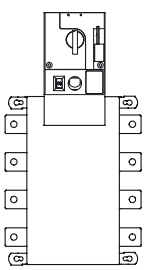
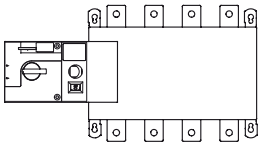
Mounting orientation

100 to 400 A / B4 - B5

			
Recommended	OK	Not Allowed	OK

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600 to 1200 A / B6 - B7

			
Recommended	Not Allowed	OK	OK

atys-ul_013 ... 014_a_1_x_cat

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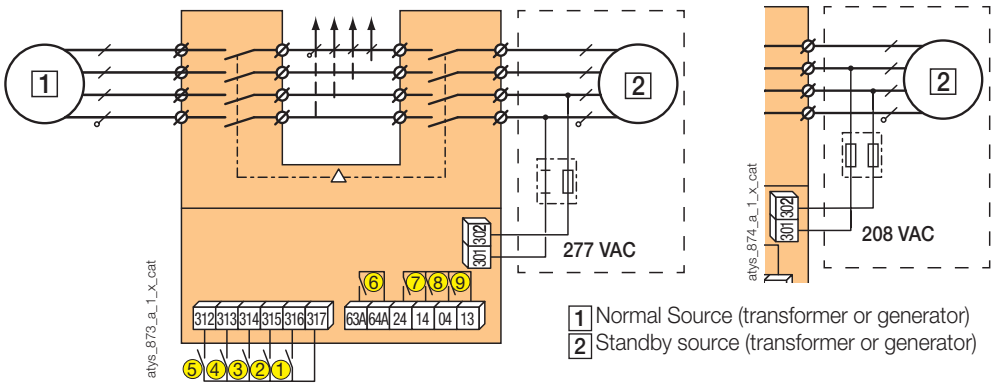
Characteristics

Characteristics according to UL 1008 (Optional standby)

General use rating (A)	100 A	200 A	260 A	400 A	600 A	800 A	1200 A
Frame size	**B4**		**B5**		**B6**	**B7**	
Operation voltage 2 P - 3/4 P	240/600	240/600	240/600	240/600	-/600	-/600	-/600
Short circuit rating at 600 VAC with fuses (kA)							
Short circuit rating at 600 VAC (kA)	100	100	65	65	100	100	100
Type of fuse	J	J	J	J	L	L	L
Short circuit rating at 600 VAC with "Specific Circuit Breaker" (kA)							
Square D JJ breaker 250 A - 2 P 240 VAC - 3/4 P 480 VAC	65	65	-	-	-	-	-
Schneider Electric NSX-F 160 A - 3/4 P 480 VAC	35	-	-	-	-	-	-
Short circuit rating at 600 VAC with "Any Breaker" (kA)							
Short circuit rating (kA)	10	10	14	14	35	35	35
Short circuit capacity (ms)	25	25	50	50	50	50	50
Rated operational current							
240 VAC “Total System” (A)	100	200	260	400	400	700	700
240 VAC resistive load (A)	100	200	260	400	600	800	1200
480 VAC “Total System” (A)	100	100	260	400	350	600	600
480 VAC resistive load (A)	100	200	260	400	600	800	1200
600 VAC “Total System” (A)	100	100	200	200	-	-	-
600 VAC resistive load (A)	100	200	260	400	600	800	1200
Mechanical endurance							
Endurance (number of operating cycles)	6050	6050	6050	4050	3050	3050	3050
Connection terminals							
Min. connection section / AWG	#6	#6	#4 / 2 X 1 /0	#4 / 2 X 1 /0	2 x #2	2 x #2	4 x #2
Max. connection section / AWG	300MCM	300MCM	600MCM / 2 X 250MCM	600MCM / 2 X 250MCM	2x 600MCM	2x 600MCM	4 x 600MCM
Power supply							
Supply voltage VAC 50/60 Hz	208-277 VAC ± 20%						
Switching time							
I to II or II to I (s)	1.3				3.2		
I to 0 or 0 to II (s)	0.85				1.8		
Duration of electrical blackout (s)	0.6				1.6		

Terminals and connections

Typical wiring for 277/480 VAC and 120/208 VAC networks



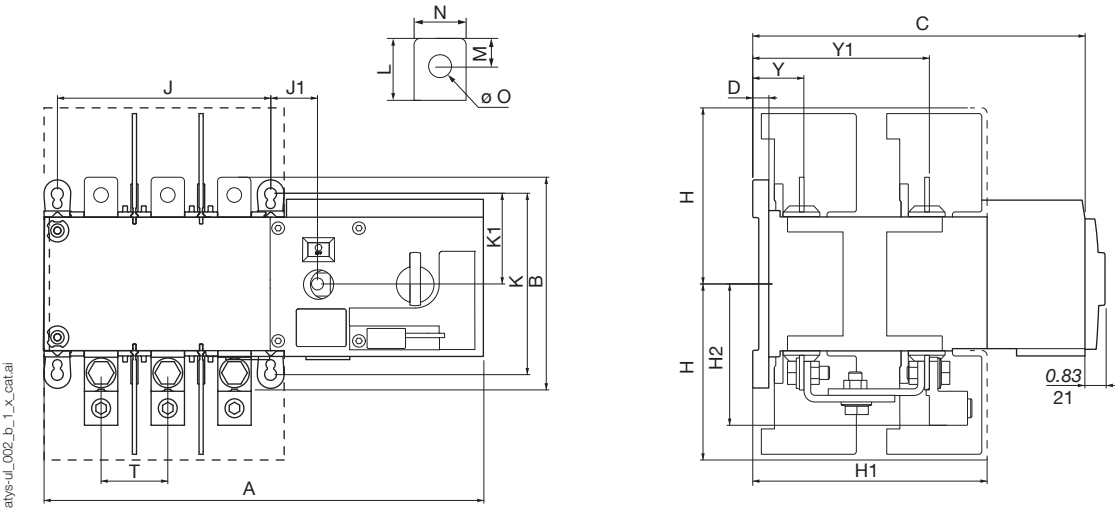
1 Normal Source (transformer or generator)
2 Standby source (transformer or generator)

1 : position 0 order input (contactor logic if closed)
2 : position I order input
3 : position II order input
4 : position 0 priority order input
5 : Input to enable or disable inputs 1 to 4
6 : product availability relay, (watchdog)
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

Dimensions (in/mm)

100 to 400 A / B4 - B5

Transfer switch dimensions

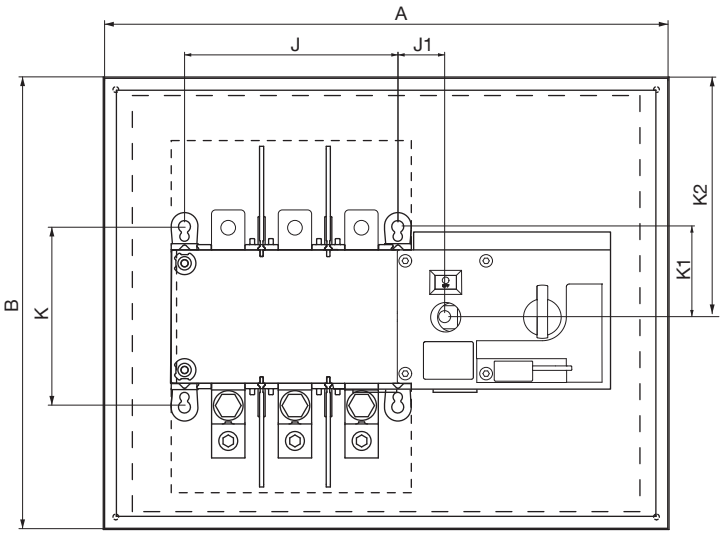


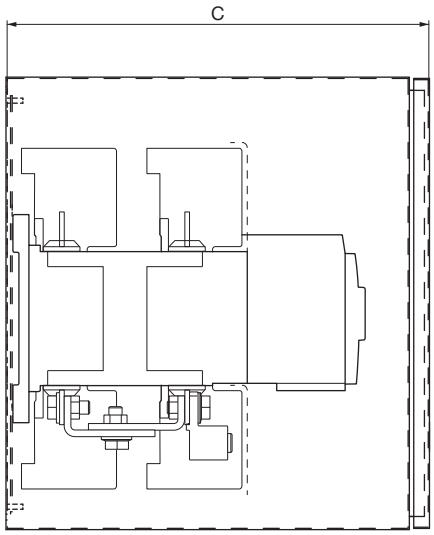
Rating (A)	Frame size	Reference		No. of poles	A		B		C		D		H		H1		H2		Y		Y1	
					in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
100 - 200	B4	9723 **2010**	9723 **2020**	2 P	12.91	328	6.30	160	9.60	244	0.41	10.5	5.08	129	6.93	176	4.21	107	1.51	38.5	5.21	132.5
		9723 **3010**	9723 **3020**	3 P																		
		9723 **4010**	9723 **4020**	4 P	14.88	378																
260 - 400	B5	9723 **2026**	9723 **2040**	2 P	14.84	377	10.23	260	12.62	320.5	0.41	10.5	8	203	6.51	165.5	6.53	166	2.04	52	7.48	190
		9723 **3026**	9723 **3040**	3 P																		
		9723 **4026**	9723 **4040**	4 P	17.20	437																

Rating (A)	Frame size	Reference		No. of poles	J		J1		K		K1		L		M		N		O		T	
					in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
100 - 200	B4	9723 **2010**	9723 **2020**	2 P	6.30	160	1.37	35	7.67	195	3.84	97.5	1.18	30	0.53	13.3	0.98	25	0.43	11	2	50
		9723 **3010**	9723 **3020**	3 P																		
		9723 **4010**	9723 **4020**	4 P	8.26	210																
260 - 400	B5	9723 **2026**	9723 **2040**	2 P	8.26	210	1.37	35	7.67	195	3.84	97.5	1.96	50	0.49	20	1.38	45	0.51	13	2.6	65
		9723 **3026**	9723 **3040**	3 P																		
		9723 **4026**	9723 **4040**	4 P	10.63	270																

100 to 400 A / B4 - B5

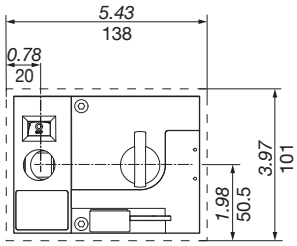
Minimum enclosure dimensions





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Door cut-out for front panel



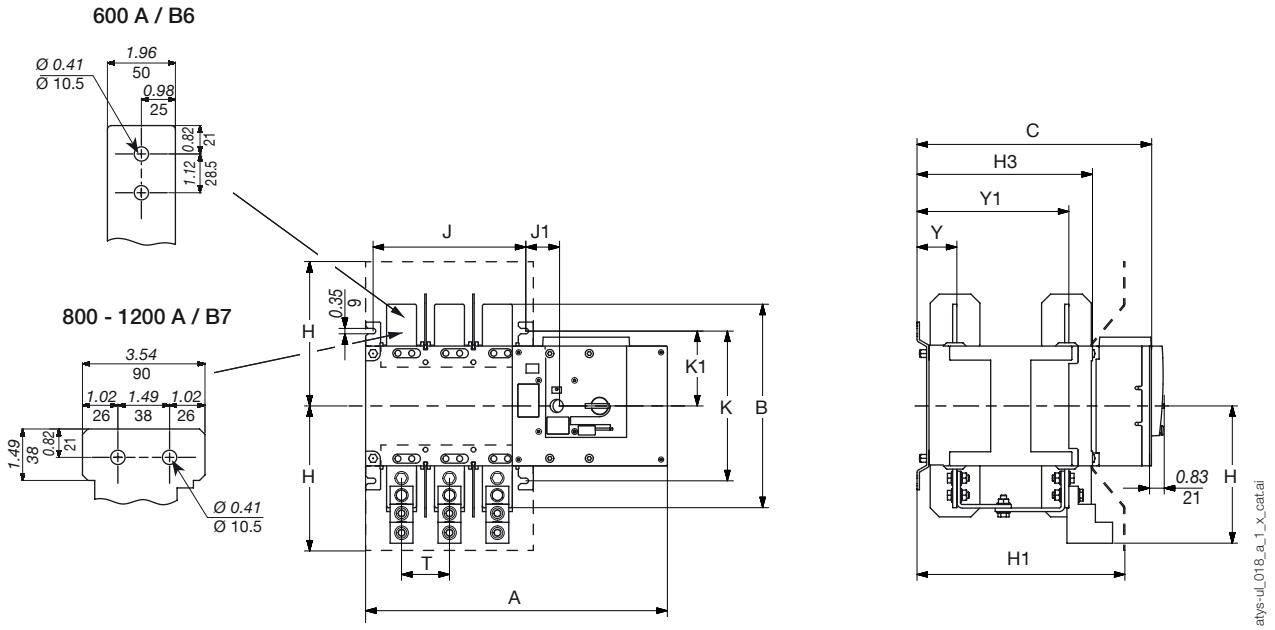
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Rating (A)	Frame size	Reference	No. of poles	A		B		C		J		J1		K		K1		K2	
				in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
100 - 200	B4	9723 **2010** - 9723 **2020**	2 P	24	610	24	610	12	305	6.30	160	1.37	35	7.67	195	2.67	68	12	305
		9723 **3010** - 9723 **3020**	3 P																
		9723 **4010** - 9723 **4020**	4 P							8.26	210								
260 - 400	B5	9723 **2026** - 9723 **2040**	2 P	32	813	32	813	16	406	8.26	210	1.37	35	7.67	195	3.84	97.5	15	381
		9723 **3026** - 9723 **3040**	3 P																
		9723 **4026** - 9723 **4040**	4 P							10.63	270								

Dimensions (in/mm) (continued)

600 to 1200 A / B6 - B7

Transfer switch dimensions

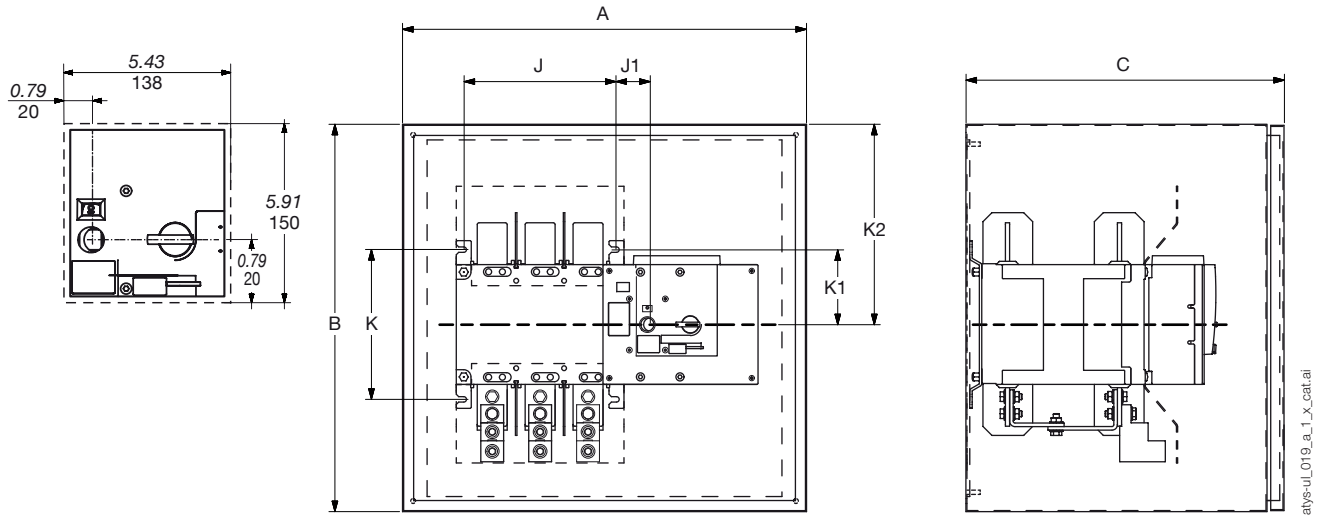


Rating (A)	Frame size	Reference	No. of poles	A		B		C		H		H1		H2		H3	
				in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
600	B6	9723 **3060**	3 P	19.8	504	13.38	340	15.4	392	9.09	231	13.7	347	9.05	230	11.5	293
		9723 **4060**	4 P	22.99	584												
800 - 1200	B7	9723 **3080** - 9723 **3120**	3 P	23.5	596	11.34	288	15.4	392	8.30	211	13.7	347	8.03	204	11.5	293
		9723 **4080** - 9723 **4120**	4 P	28.2	716												

Rating (A)	Frame size	Reference	No. of poles	J		J1		K		K1		T		Y		Y1	
				in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
600	B6	9723 **3060**	3 P	10	255	2.02	51.5	9.84	250	4.92	125	3.15	80	2.61	66.5	9.98	254
		9723 **4060**	4 P	13.2	335												
800 - 1200	B7	9723 **3080** - 9723 **3120**	3 P	13.7	347	2.02	51.5	9.84	250	4.92	125	4.72	120	2.65	67.7	9.98	254
		9723 **4080** - 9723 **4120**	4 P	18.4	467												

600 to 1200 A / B6 - B7

Minimum enclosure dimensions



Rating (A)	Frame size	Reference	No. of poles	A		B		C		J		J1		K		K1		K2	
				in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
600	B6	9723 **3060**	3 P	36	915	48	1220	20	508	10.04	255	2.02	51.5	9.84	250	4.92	125	24	610
		9723 **4060**	4 P							12.18	355								
800 - 1200	B7	9723 **3080** - 9723 **3120**	3 P	36	915	60	1524	20	508	13.66	347	2.02	51.5	9.84	250	4.92	125	30	762
		9723 **4080** - 9723 **4120**	4 P							18.38	467								