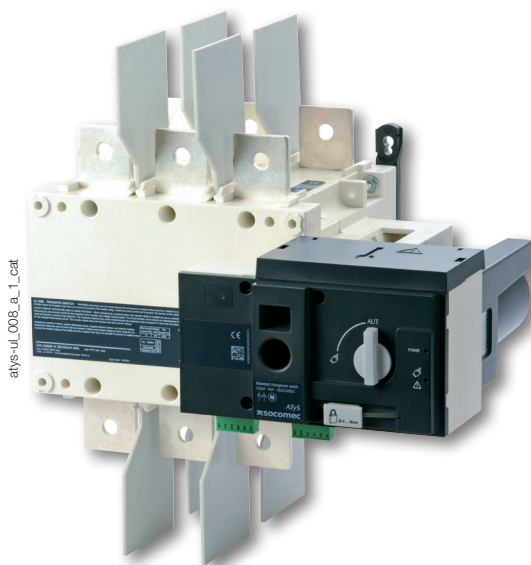


ATyS UL 1008

Non-automatic Transfer Switching Equipment from 100 to 1200 A

Transfer switches



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 disconnecter where the main components are based on proven technology also meeting requirements in IEC 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.

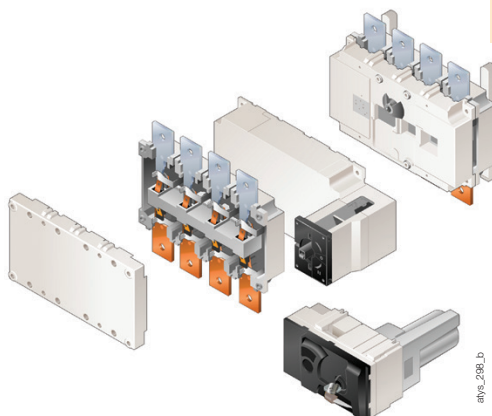
Maintenance free

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.



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

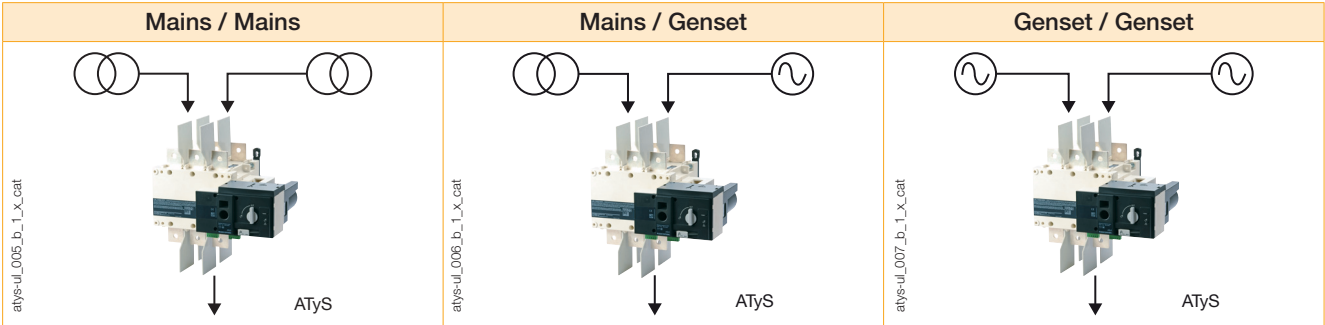


Your choice of ATS controls

- > 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.

Typical applications

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

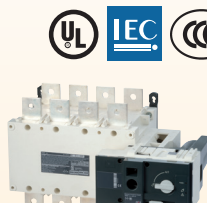


Part of a globally recognized range

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.



ATyS r

Remote Transfer Switch


UL IEC CCC



ATyS d

Remote Transfer Switching (RTS)


IEC CCC



ATyS t

Automatic Transfer Switching (ATS)


IEC CCC



ATyS g

Automatic Transfer Switching (ATS)

IEC CCC



ATyS p

Automatic Transfer Switching (ATS)

IEC CCC

WEB SERVER OPTION

Remote Transfer Switch

+

Dual power supply

+

Automatic controller to manage mains/mains applications

+

Automatic controller to manage mains/genset applications

+

Functions for energy management
Communication options

+

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

Non-automatic Transfer Switching Equipment

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	2/3 P 4158 3021 4 P	NO/NC 4159 0021	2 P	
		3 P	9723 3010				3 P	
		4 P	9723 4010				3 P	
200 A		2 P	9723 2020	4 P	3954 2020			
		3 P	9723 3020	4 P	3954 3020			
		4 P	9723 4020	4 P	3954 4020			
260 A	B5	2 P	9723 2026	2 P 4159 2041 3 P	2/3 P 4158 3041 4 P	Low level 4159 0022	2 P	
		3 P	9723 3026				3 P	
		4 P	9723 4026				3 P	
400 A		2 P	9723 2040	4 P	3954 3040			
		3 P	9723 3040	4 P	3954 4040			
		4 P	9723 4040	4 P	3954 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	3 P 1609 3080	Contact NO/NC as standard	3 P	
		4 P	9723 4080				4 P	3954 3120
1200 A		3 P	9723 3120	4 P	1609 4080		4 P	3954 4120
		4 P	9723 4120	4159 4080	1609 4080		4 P	3954 4120

Common accessories - more available on next pages.

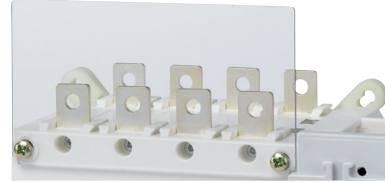
Accessories

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.



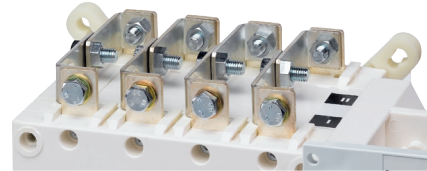
access_207_a_2_cat

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.



access_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



access_065_a_1_cat



access_065_a_1_cat

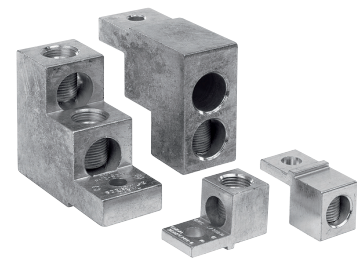
A maximum of 2 Aux contacts per position may be added.

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

ATyS UL 1008

Non-automatic Transfer Switching Equipment

from 100 to 1200 A

Spares

Motorization module

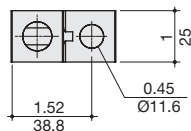
Rating (A)	No. of poles	Frame size	Used for ATyS reference	Motorization module References
100	2 / 3 / 4 P	B4	9723 2010 - 9723 3010 - 9723 4010	9709 5010
200	2 / 3 / 4 P		9723 2020 - 9723 3020 - 9723 4020	9709 5020
260	2 / 3 / 4 P	B5	9723 2026 - 9723 3026 - 9723 4026	9709 5026
400	2 / 3 / 4 P		9723 2040 - 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



atys_b71.eps

Terminal lugs (in/mm)

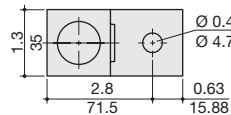
100 and 200 A / B4



300 kcmil

siroco_115_b_1_us_cat

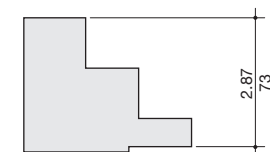
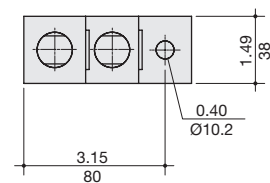
260 and 400 A / B5



600 kcmil

siroco-ul_010_a_1_us_cat

600 to 1200 A / B6 - B7



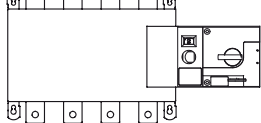
2 x 600 kcmil

siroco_116_b_1_us_cat

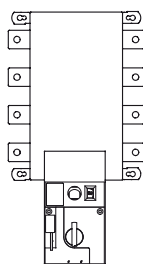
Mounting orientation

100 to 400 A / B4 - B5

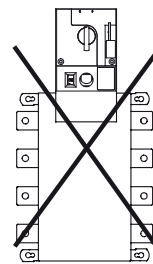
atys-ul_013 ... 014_a_1_x_cat



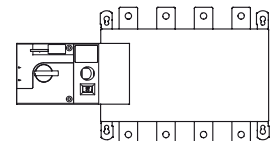
Recommended



OK



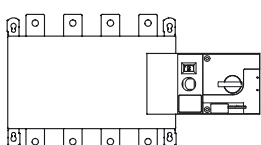
Not Allowed



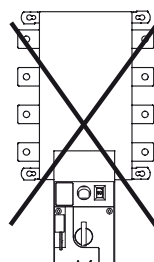
OK

600 to 1200 A / B6 - B7

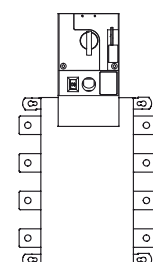
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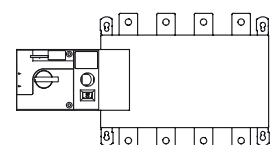
Recommended



Not Allowed



OK



OK

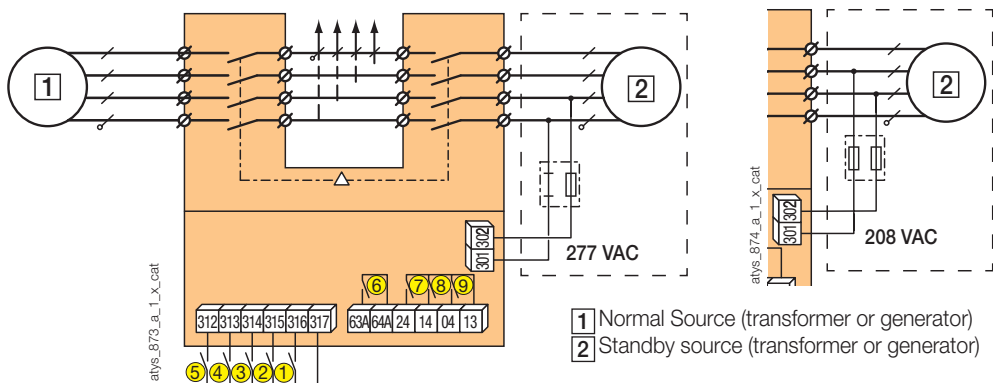
Characteristics

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: 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

ATyS UL 1008

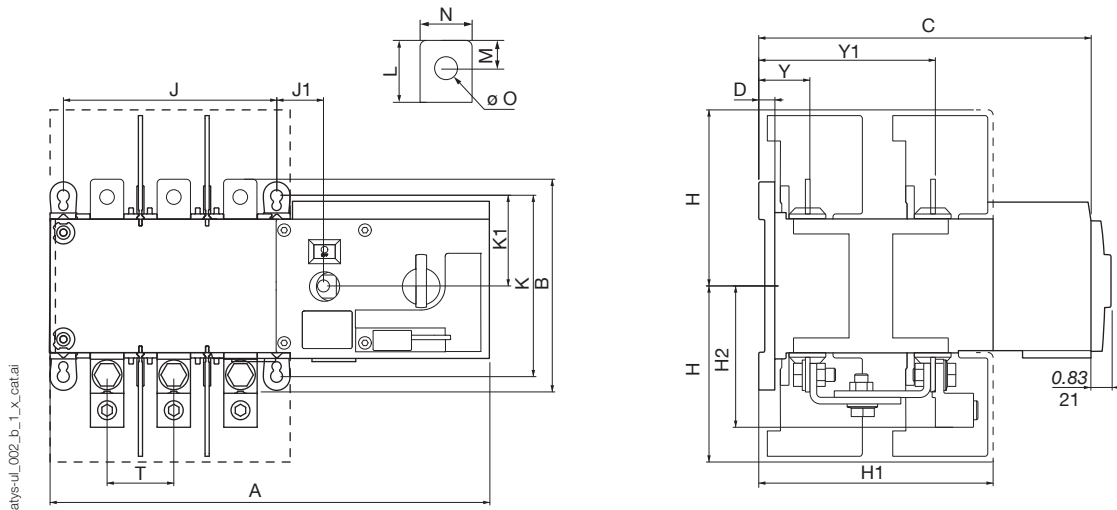
Non-automatic Transfer Switching Equipment

from 100 to 1200 A

Dimensions (in/mm)

100 to 400 A / B4 - B5

Transfer switch dimensions

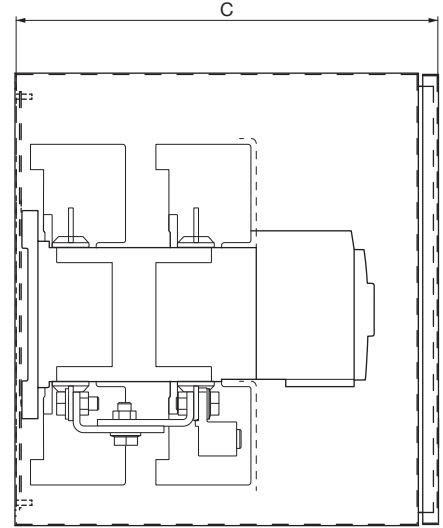
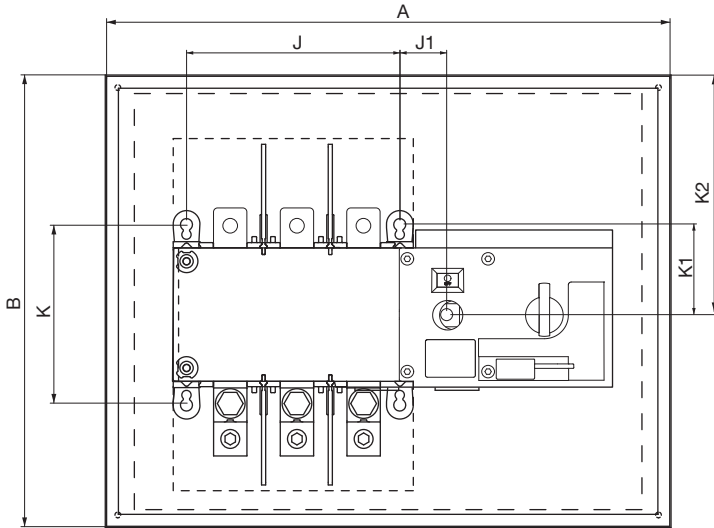


Rating (A)	Frame size	Reference	No. of poles	A		B		C		D		H		H1		H2		Y		Y1		
				in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
100 - 200	B4	9723 2010 - 9723 2020	2 P	12.91	328	6.30	160	9.60	244	0.41	10.5	5.08	129	6.93	176	4.21	107	1.51	38.5	5.21	132.5	
		9723 3010 - 9723 3020	3 P																			
		9723 4010 - 9723 4020	4 P	14.88	378																	
260 - 400	B5	9723 2026 - 9723 2040	2 P	14.84	377																	
		9723 3026 - 9723 3040	3 P			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 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																	
		9723 3026 - 9723 3040	3 P			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 4026 - 9723 4040	4 P	10.63	270																	

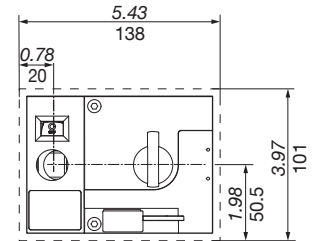
100 to 400 A / B4 - B5

Minimum enclosure dimensions



atys-ul_009_b_1_x_cat.ai

Door cut-out for front panel



atys-ul_017_a_1_x_cat.ai

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							8.26	210								
		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							10.63	270								
		9723 4026 - 9723 4040	4 P							10.63	270								

ATyS UL 1008

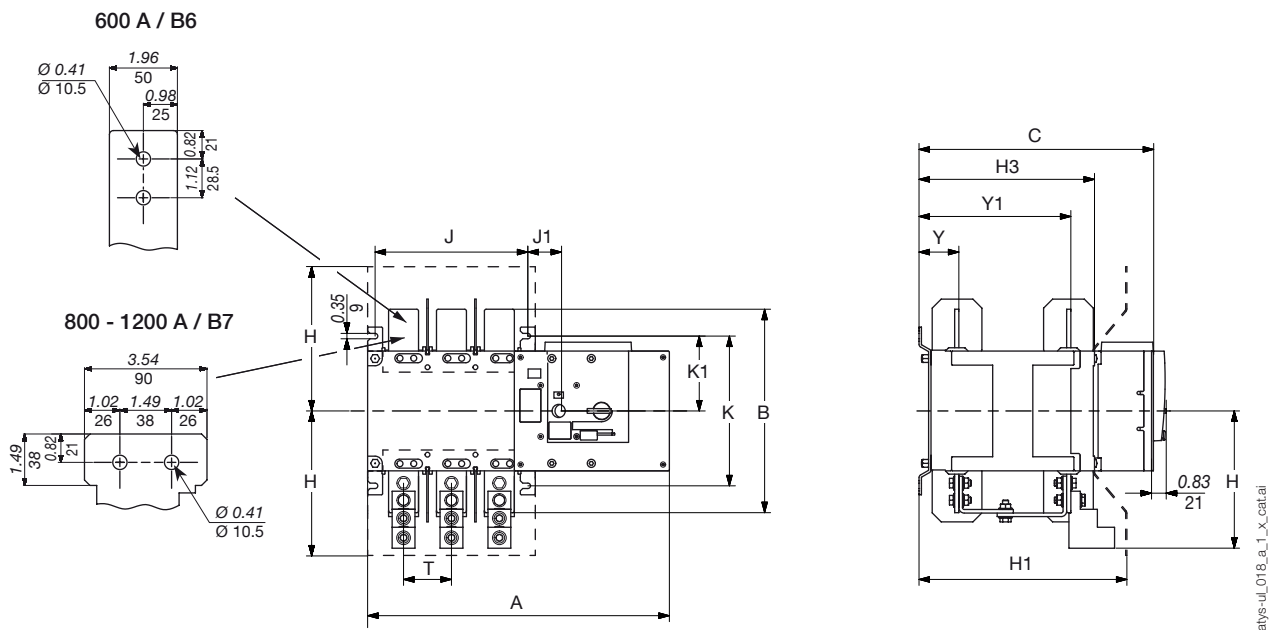
Non-automatic Transfer Switching Equipment

from 100 to 1200 A

Dimensions (in/mm) (continued)

600 to 1200 A / B6 - B7

Transfer switch dimensions

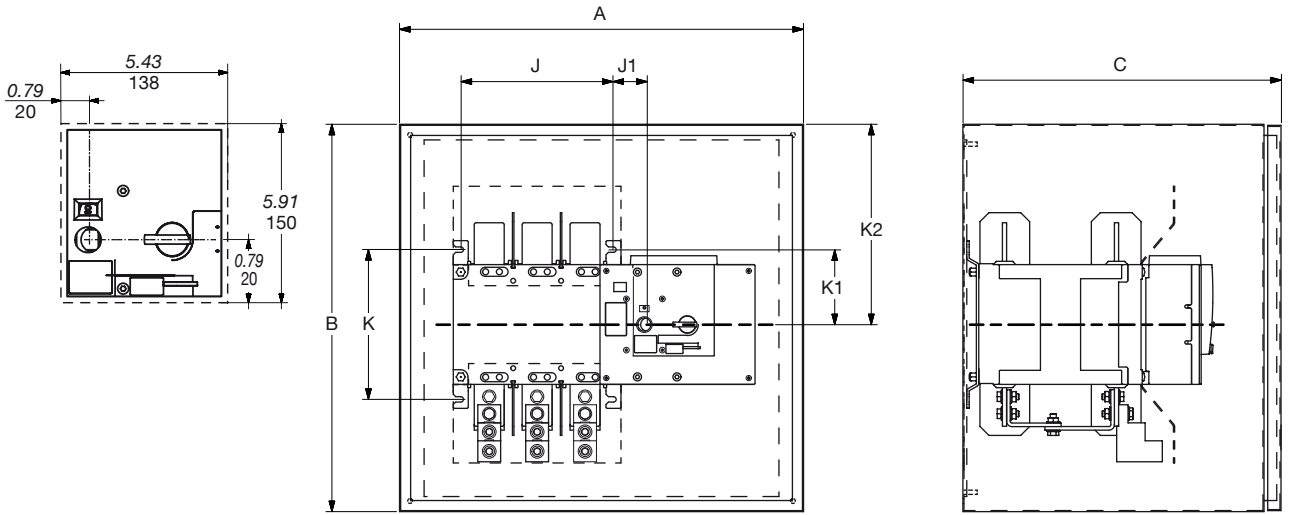


Rating (A)	Frame size	Reference	No. of poles	A		B		C		H		H1		H2		H3	
				in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
600	B6	9723 3060	3 P	19.8	504	13.38	340	15.4	392	9.09	231	13.7	347	9.05	230	11.5	293
		9723 4060	4 P	22.99	584												
800 - 1200	B7	9723 3080 - 9723 3120	3 P	23.5	596	11.34	288	15.4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



atys-ul1019_a_1_x_cat.ai

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								