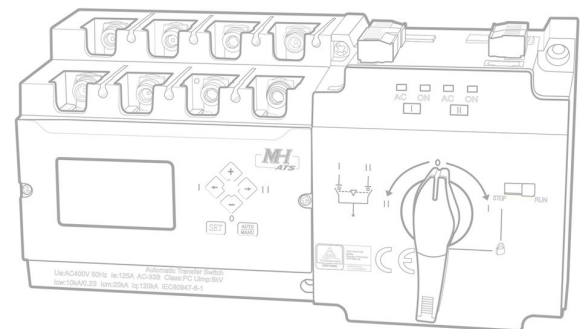
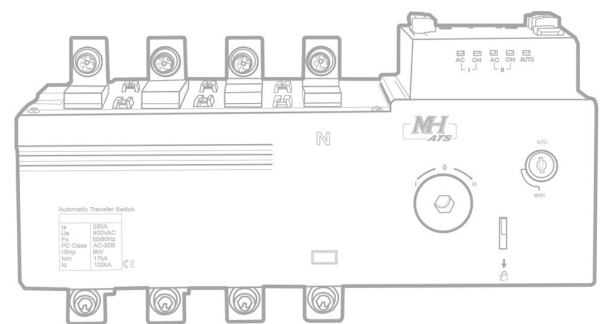




Designed for
Dual Power Source Networks



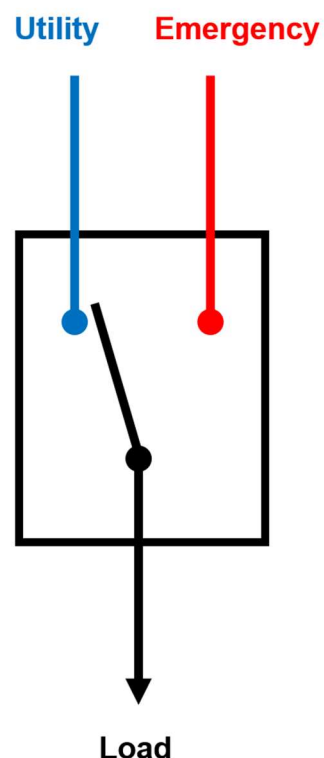
MH S3 ATS Series

In the event of main power failure, this system switches power from the primary source (such as utility) to a standby or alternative source (such as a backup generator) automatically.

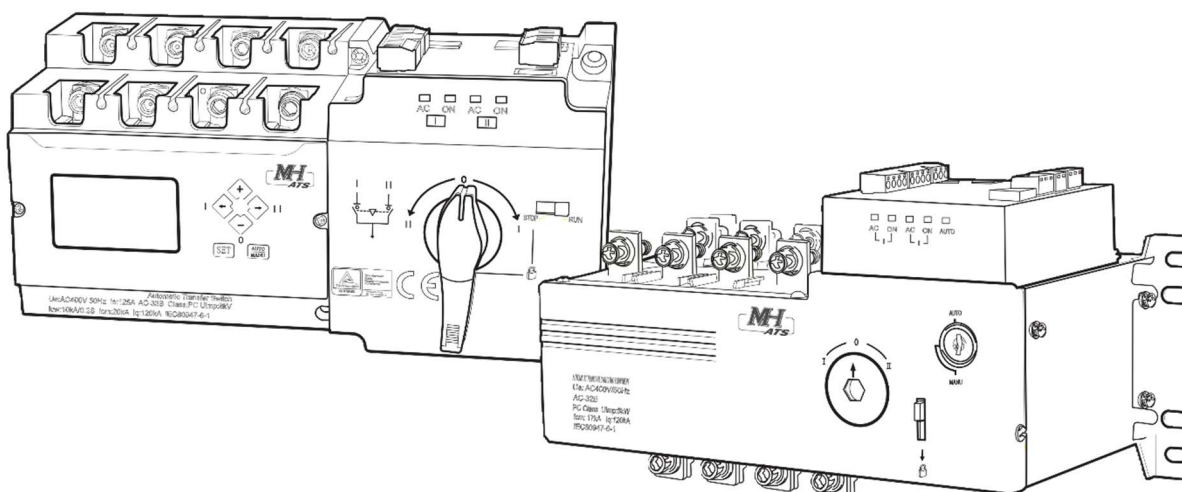
- Capacity ranges from 80A to 3,200A
- Available in 1P2W, 3P3W, and 3P4W systems
- Suitable for small industries and commercial sectors
- Features a 3-stage efficient switching system

Key Features

- Mechanical interlock
- Motorised driven switching
- Built-in controller with remote display (applicable for 125A to 1,600A model)
- Built-in controller with display (applicable for 80A model only)
- External LCD display
- Class PC
- Utilization category AC-33B
- Fire alarm input and generator control
- Compliance with IEC 60947-6-1



Single Line Diagram of MH S3 ATS Series



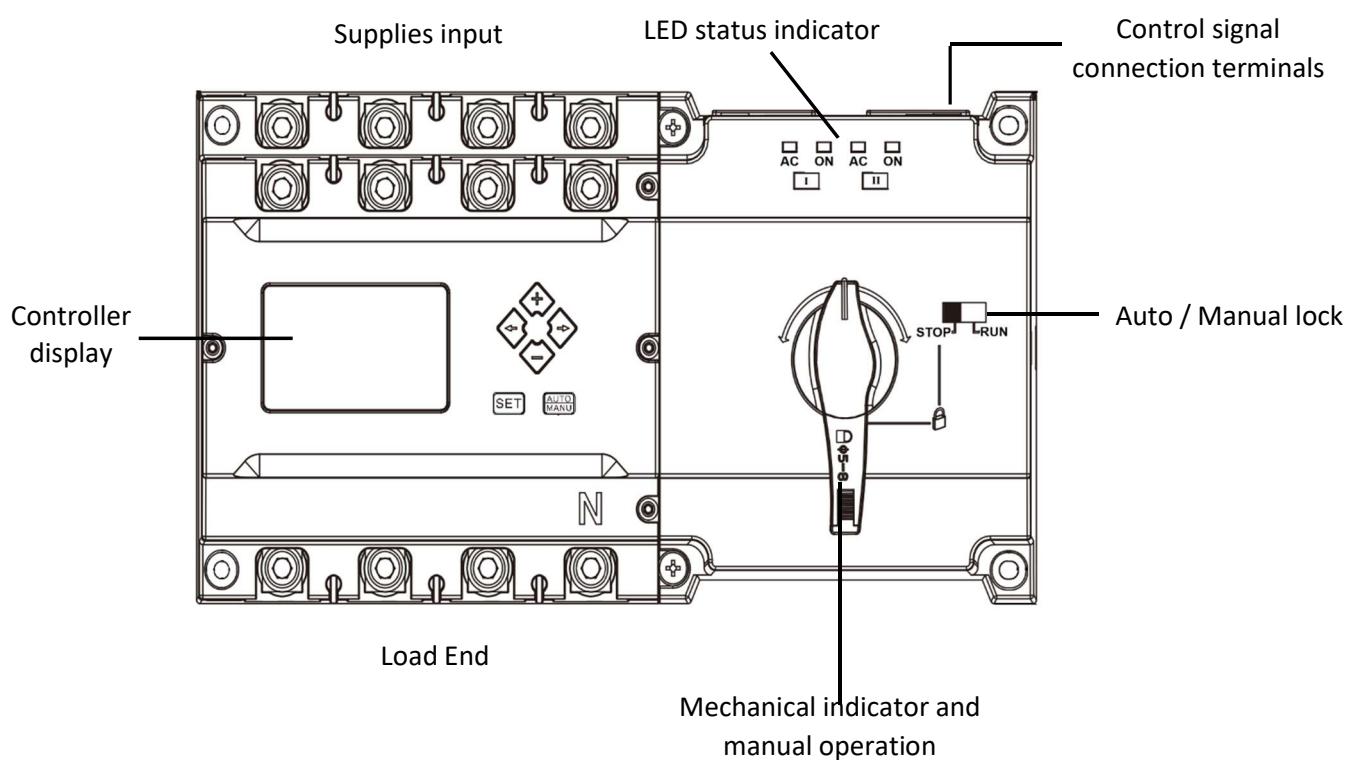
ATS Technical Datasheet (80A to 1,600A)

MH ATS	MH S3 Series
Specifications	
Poles	2, 3, 4
Main contact positions	3 (Normal-Off-Alternative)
Class	PC
Utilization category	AC-33B
Switching Mechanism	
Open transition	Yes
Delayed transition	Yes
Manual transition	Yes
Automatic transition	Yes
Semi-automatic transition (via controller)	Yes
Settings	
Source priority	Primary source
	Alternative source
	No priority
Overvoltage threshold	242 to 330 V _{LN} (default 263 V _{LN})
Overvoltage recovery	Default 10V
Undervoltage threshold	154 to 198 V _{LN} (default 187 V _{LN})
Undervoltage recovery	Default 10V
Over frequency threshold	52.5 to 60Hz (50Hz system; default 60Hz) 63 to 72Hz (60Hz system)
Under frequency threshold	40 to 47.5Hz (50Hz system; default 40Hz) 48 to 57 Hz (60Hz system)
Time Delay Settings	
Source A/B failure detection delay	0 to 180s (default 5s)
Source A to B transfer delay time	0 to 180s (default 5s)
Source B to A transfer delay time	0 to 180s (default 5s)
Generator start delay	0 to 180s (default 5s)
Generator stop delay	0 to 180s (default 5s)
Indications	
Normal source available	Yes
Alternative source available	Yes
Main switch position (normal, alternative)	Yes
Operating status	Yes
(Auto / Manual)	
Communication	
RS-485 Modbus RTU	Yes
Fire Alarm Input	Yes
Standard Compliance	
Product Safety Requirements	BS EN / IEC 60947-6-1

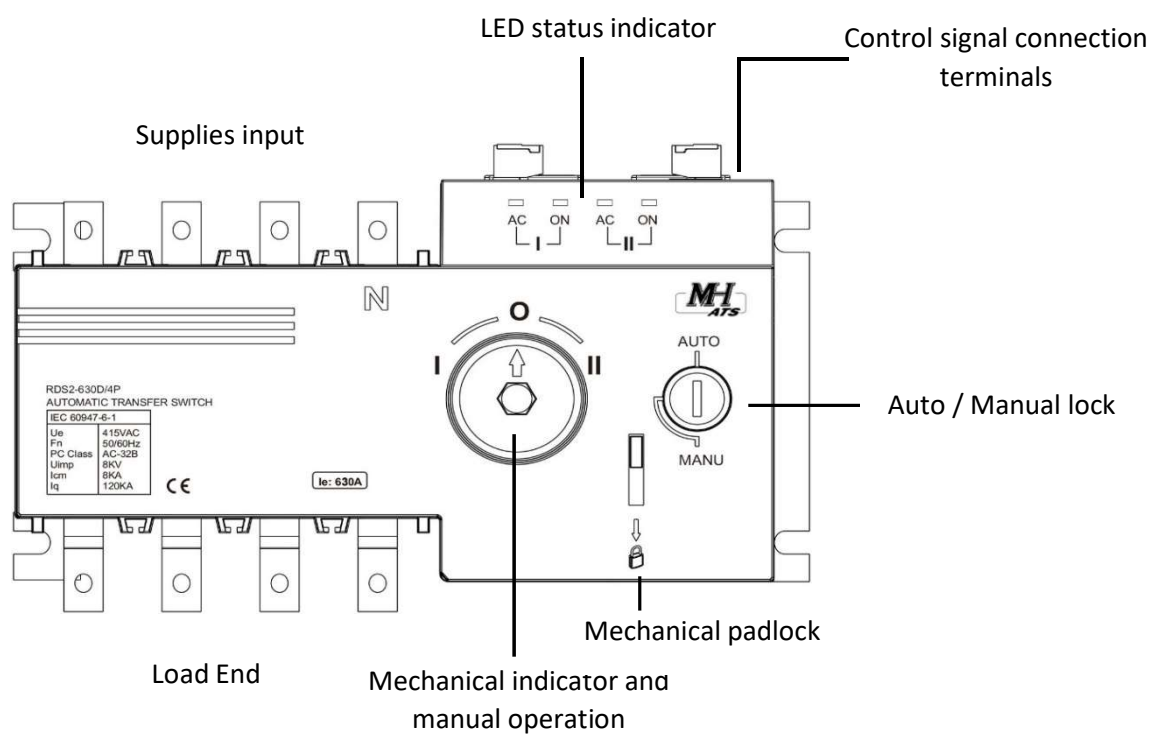
	S3-80-4P	S3-125-4P	S3-250-4P	S3-630-4P	S3-1000-4P	S3-1600-4P
Rated operational current, I _e	80 A	125 A	250 A	630 A	1,000 A	1,600A
Rated operational voltage, U _e	400 VAC±30%					
Rated frequency	50 / 60 Hz					
Rated insulation voltage, U _i	690 VAC					
Rated impulse withstand voltage, U _{imp}	8 kV					
Number of pole	4 Poles					
Rated Current	16 A, 20 A, 32 A, 40 A, 63 A, 80 A	100 A, 125 A	160 A, 200 A, 250 A	400 A, 500 A, 600 A	800 A, 1,000 A	1,250 A, 1,600 A
Rated short-time withstand current, I _{cw}	10 kA	NA	NA	NA	NA	NA
Rated conditional short-circuit current, I _q	NA	120 kA				
Rated short-time making capacity, I _{cm}	15 kA	8 kA	17 kA	26 kA	55 kA	55 kA
ATS dimension ¹ (W x D x H), mm	230 x 125 x 130	330 x 125 x 142	436 x 198 x 175	502 x 244 x 260	1,050 x 320 x 365	1,050 x 320 x 366
Remote display unit dimension (W x D x H), mm	NA	133 x 40.5 x 66				

¹ Dimensions for other than the standard 4-pole unit are available upon request.

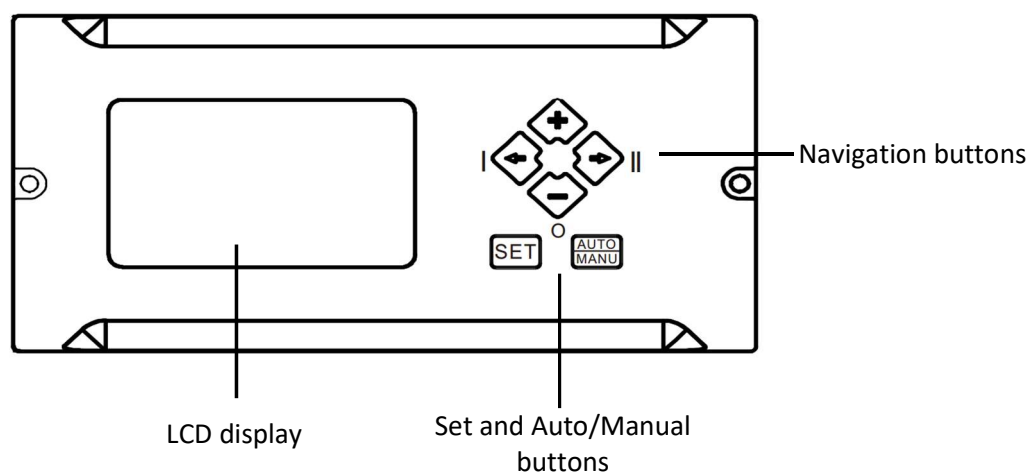
ATS Product Overview (80A)



ATS Product Overview (125A to 1,600A)

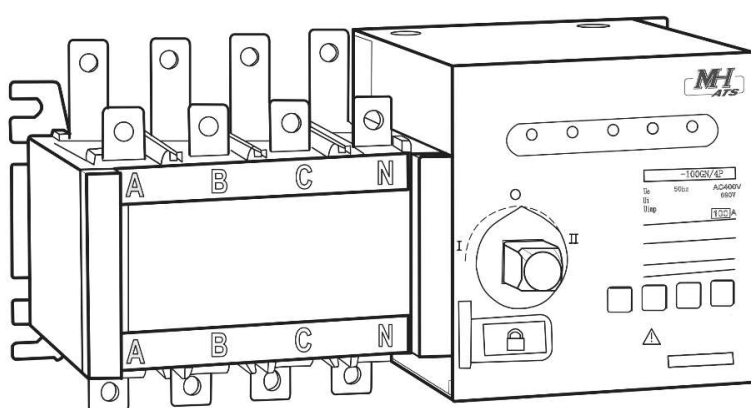
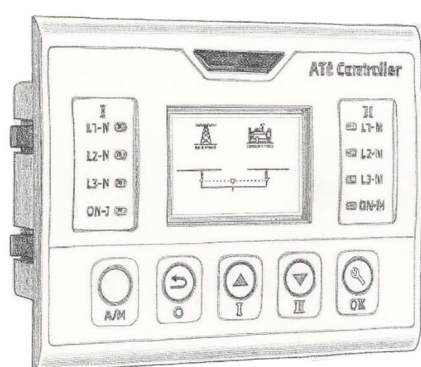


ATS Remote Display Unit - Product Overview (applicable for 125A to 1,600A)



ATS Technical Datasheet (2,000A to 3,200A)

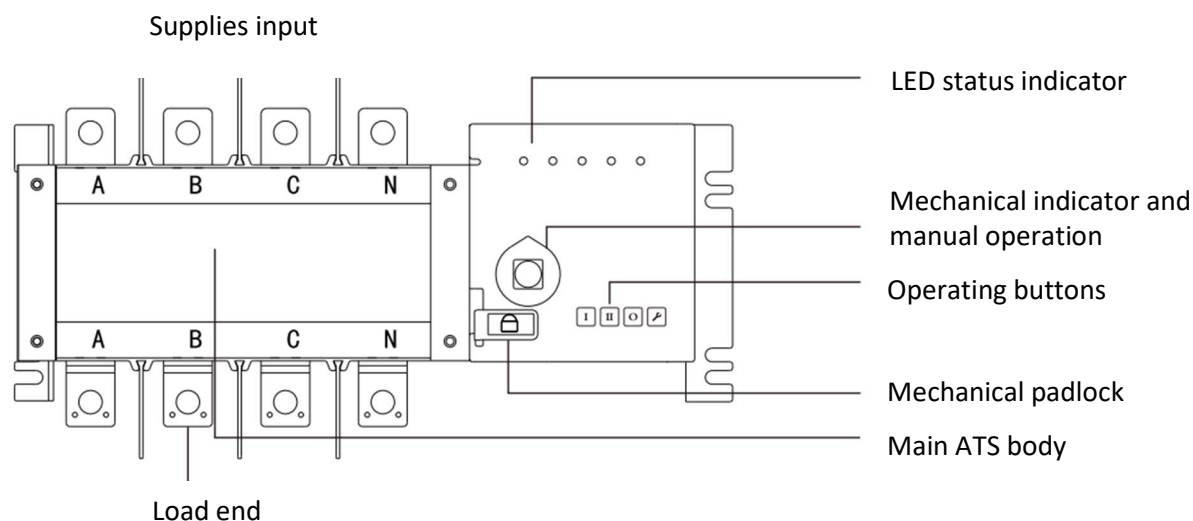
MH ATS	MH S3 Series
Specifications	
Poles	2, 3, 4
Main contact positions	3 (Normal-Off-Alternative)
Class	PC
Utilization category	AC-33B
Switching Mechanism	
Open transition	Yes
Delayed transition	Yes
Manual transition	Yes
Automatic transition	Yes
Semi-automatic transition (via controller)	Yes
Indications	
Normal source available	Yes
Alternative source available	Yes
Main switch position (normal, alternative)	Yes
Operating status	Yes
(Auto / Manual)	
Standard Compliance	
Product Safety Requirements	BS EN / IEC 60947-6-1



	S3-2000-4P	S3-2500-4P	S3-3200-4P
Rated operational current, I _e	2,000 A	2,500 A	3,200 A
Rated operational voltage, U _e	400 VAC±30%		
Rated frequency	50 / 60 Hz		
Rated insulation voltage, U _i	1,000 VAC		
Rated impulse withstand voltage, U _{imp}	12 kV		
Number of pole	4 Poles		
Rated Current	2,000 A	2,500 A	3,200 A
Rated short-time withstand current, I _{cw}	50 kA	50 kA	50 kA
Rated short-time making capacity, I _{cm}	105 kA	105 kA	105 kA
Dimension ² (W x D x H), mm	712.5 x 482.5 x 441	712.5 x 482.5 x 446	712.5 x 482.5 x 451

² Dimensions for other than the standard 4-pole unit are available upon request.

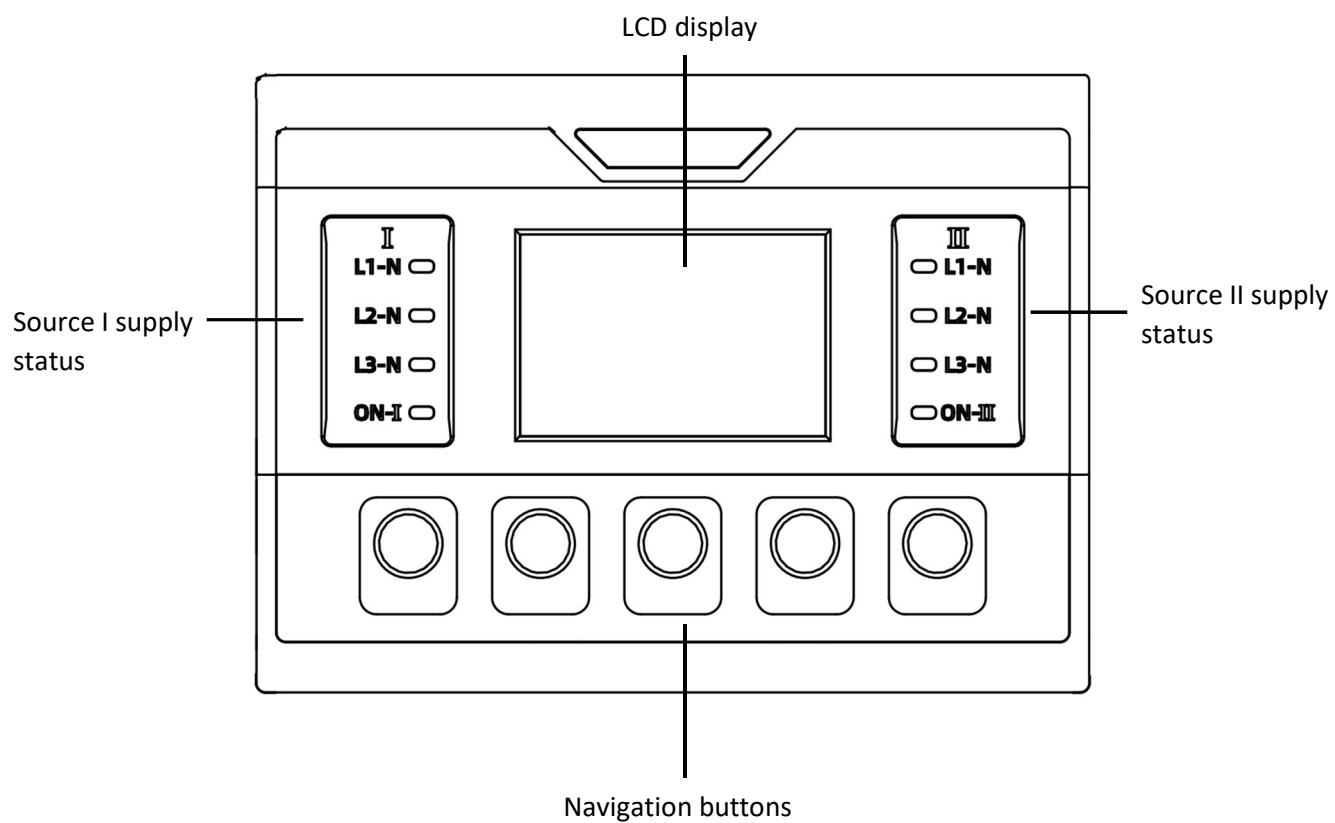
ATS Product Overview (2,000A to 3,200A)



ATS Controller - Technical Datasheet (only applicable for 2,000 to 3,200A)

	MH-SCT-5N
General	
Display	LCD
Dimension (W x D x H), mm	170 x 56 x 126
Controller Settings	
Source priority	Primary source
	Alternative source
	No priority
Rated Frequency	50Hz or 60Hz
Overvoltage threshold	242 to 286 V _{LN} (default 264 V _{LN})
Overvoltage recovery	1-20V (default 10V)
Undervoltage threshold	154 to 198 V _{LN} (default 176 V _{LN})
Undervoltage recovery	1-20V (default 10V)
Over frequency threshold	52Hz (50Hz system); 62Hz (60Hz system)
Under frequency threshold	48Hz (50Hz system); 58Hz (60Hz system)
Controller Time Delay Settings	
Source A/B failure detection delay	0 to 99.9s (default 2.0s)
Source A/B fail return delay	0 to 99.9s (default 0.0s)
Source A to B transfer delay time	0 to 99.9s (default 5.0s)
Source B to A transfer delay time	0 to 99.9s (default 5.0s)
Off to source A/B delay	0 to 99.9s (default 0.0s)
Generator start delay	0 to 999s (default 5s)
Generator stop delay	0 to 999s (default 5s)
Indications	
Normal source (A) available	Yes
Alternative source (B) available	Yes
Main switch position (normal, alternative)	Yes
Operating status	Yes
(Auto / Manual)	
Communication	
RS-485 Modbus RTU	Yes
Fire Alarm Input	Yes

ATS Controller - Product Overview



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