

ATS Controller Function and Parameter Comparison Table in LVMA

Product Pictures			
			
Controller type	Y-700N	Y-703N	Y701B
Controller Installation			
Installation method	Embedded installation (Mounted on panel door)		
Connection mode	Terminal block	Terminal block + Customized cables	
Outline dimensions W*L*H	211*155*55	170*126*56	150*122*62
Hole size W*L	186*141	150*111	130*111
Characteristics Overview-Control Circuit			
Compatible switch types	ACB/MCCB/MTS/ATS	MCCB/MTS/ATS	MCCB/MTS/ATS
Output ports/Number	7: Programmable (pulse signal or continuous model)	3(Fixed)+3(Programmable)	3(Fixed)
Input ports/Number	6/Dry Contact Input/Programmable	6/Dry Contact Input/Programmable	4/Fixed
Rated operating voltage Ue	230/400V	230/400V	230/400V
Rated insulation voltage Ui	800V	800V	800V
Reference voltage for power detection Un	220/380V	220/380V	220/380V
Controller (Min./Max.)			
Operating voltage range (V)	70~120%Ue	70~120%Ue	70~120%Ue
Operating voltage range (V)	Phase voltage 161~277	Phase voltage 161~277	Phase voltage 161~277
	Line voltage 280~480	Line voltage 280~480	Line voltage 280~480
Max. phase voltage of control power Us (V)	Phase voltage 277	Phase voltage 277	Phase voltage 277
Max. measured line voltage of control power Us (v)	Line voltage 660	Line voltage 480	Line voltage 480
Rated operating frequency	Adaptive 50/60Hz	Adaptive 50/60Hz	Adaptive 50/60Hz
Applicable Grounding System	IT/TN-C/TN-S/TT	TN-C/TN-S/TT	TN-C/TN-S/TT
Detection power (3-Phase products)	Common 3P/Standby 3P	Common 3P/Standby 3P	Common 3P/Standby 3P
Detection power (1-Phase products)	Common 1P/Standby 1P	Common 1P/Standby 1P	Common 1P/Standby 1P
Voltage loss judgment value	≤30% Ue	≤30% Ue	≤30% Ue
Phase Failure Transfer			
Detection power (3-Phase products)	Common 3P/Standby 3P	Common 3P/Standby 3P	Common 3P/Standby 3P
Detection power (1-Phase products)	Common 1P/Standby 1P	Common 1P/Standby 1P	Common 1P/Standby 1P
Phase failure judgment value (any phase)	≤50V	≤50V	≤50V
Voltage loss and phase failure recovery	85%	180V	180V
Rated voltage Ue 230V, including 220V			
Voltage loss and phase failure recovery	85%	310V	310V
Rated voltage Ue 400V, including			
Undervoltage Transfer			
Detection power	Common 3P/Standby 3P	Common 3P/Standby 3P	Common 3P/Standby 3P
Undervoltage setting range	50-100%	100-200V	100-200V
Rated voltage Ue 230V, including 220V			
Factory default value	80%Ue	165V	165V
Undervoltage recovery value	85%Ue	—	Undervoltage value +10-30V
Rated voltage Ue 230V, including 220V		Default+10V	Default+10V
Overvoltage Transfer			
Detection power	Common 3P/Standby 3P	Common 3P/Standby 3P	Common 3P/Standby 3P
Overvoltage setting range	100-150%Ue	200V-300V	200V-300V
Rated voltage Ue 230V, including 220V			
Factory default value	120%Ue	270V	270V
Overvoltage recovery value	115%Ue	—	Overvoltage value -10-30V
Rated voltage Ue 230V, including 220V		Default-10V	Default-20V
Frequency Abnormality Transfer			
Detection power	Common 3P/Standby 3P	Common 3P/Standby 3P	Common 3P/Standby 3P
Frequency abnormality setting range	0-70Hz	0-70Hz	Only detection

Frequency abnormality setting value (50Hz) accuracy: 0.1Hz	43~57	43~57	Only detection
Frequency abnormality setting value (60Hz)	51~69	51~69	
Frequency abnormality recovery range	±2Hz	±2Hz	
Frequency abnormality recovery value (50Hz)	48~52	48~52	
Frequency abnormality recovery value (60Hz)	58~62	58~62	
Three-phase Voltage Imbalance Detection			
Detection power	—	—	—
Three-phase voltage imbalance setting value	—	—	—
Three-phase voltage imbalance recovery value	—	—	—
Phase Sequence Detection			
Detection power	■	■	■
Transfer Type			
Working mode	R/S/I	R/S	R/S
Operation/Control Mode			
Fire alarm linkage	■	■	■
Fire alarm feedback	■	■	■
Button control	■	■	■
Communication control	■	■	■
Automatic control	■	■	■
Maintenance Auxiliary Function			
Test function	■	—	—
Reset function	■	—	—
Fire Alarm Linkage Function			
Dry contact fire alarm input	■	■	■
Powered fire alarm input	—	■	—
Remote Control (Dry Contact)			
Remote control to close S1 power	■	—	—
Remote control to close S2 power	■	—	—
Remote control to open	■	■	—
Prohibit transfer to power supply 1	□	—	—
Prohibit transfer to power supply 2	□	—	—
Fire inspection (remote deployment)	□	□	—
Delay Setting			
T1 Fault confirmation delay time	0-999S	0~240s	0~240s
T2 Transient hold time	0-999S	—	—
T3 Recovery delay time	0-999S	0~240s	0~240s
T4 Load disconnection delay time	—	—	—
T5 (T1) Generator start delay	0-999S	0~240s	0~240s
T6 Generator stop delay	0-999S	0~240s	0~240s
Display and Operation			
Display method	LCD (Liquid Crystal Display)	LCD (Digital)	LED (Digital)
System SLD	■	■	—
Parameter display	■	■	—
Power status display	■	■	■
Switch operating position status display	■	■	■
Controller button operation	■	■	■
Auxiliary Function			
RTC real-time time	■	—	—
Password protection function	■	—	—
Generator start control function	■	■	■
Generator stop control function	■	■	■
Load disconnection function	—	—	—
Transfer timeout fault locking function	■	■	■
Fault alarm output	■	■	■
Event record function	■	■	■

Automatic preferred source selection function	■	■	■
Communication function (Modbus)	□	□	□
External power connector DC24V	■	—	□
Programmable DI reserved	■	—	—
Programmable DO reserved	■	■/2	—
Current Monitoring Module			
Load current monitoring	■	—	—
Load power monitoring	■	—	—
Over-current alarm	■	—	—
Environmental Requirement			
Environment categories	F	F	F
Pollution level	Level3	Level3	Level3
Altitude	3000m	3000m	3000m
Storage and transport temperature	-35~85°C	-35~85°C	-35~85°C
Temperature	-25~70°C	-25~70°C	-25~70°C
Humidity	90% Humidity at 55(±2)°C	90% Humidity at 55(±2)°C	90% Humidity at 55(±2)°C
Salt spray level	KB alternating salt spray test	KB alternating salt spray test	KB alternating salt spray test
	Severity Level: Level1	Severity Level: Level1	Severity Level: Level1
IP level	IP42	IP40	IP40
IK level	IK07	IK07	IK07
Effect of operating vibration	0.7g	0.7g	0.7g
Electromagnetic Compatibility (EMC)	E1	E2	
Immunity-Electrostatic discharge	Level4	Level4	Level4
Immunity-Radio frequency radiation interference	Level3	Level3	Level3
Immunity-Electrical fast transients	Level3	Level4	Level4
Immunity-Surge	Level3	Level4	Level4
Immunity-Radio frequency conducted interference	Level3	LevelX	LevelX
Immunity-Harmonics	Level3	Level3	Level3
Immunity-Voltage sag	Level3	Level3	Level3
Immunity-Short interruption	Level3	Level3	Level3
Emission-Radio frequency conducted emission test	Class B	Class B	Class B
Emission-Radio frequency radiation emission test	Class A	Class A	Class A
Dielectric property	Between common standby power supply:		
	Uip=1200+Ue	Uip=1200+Ue	Uip=1200+Ue
	Uimp=8kV	Uimp=8kV	Uimp=8kV
	Common-standby power supply to ground:		
	Uip=1200+Ue	Uip=1200+Ue	Uip=1200+Ue
	Uimp=6kV	Uimp=6kV	Uimp=6kV
Power frequency magnetic field	Level4	Level4	Level4
Certification Requirements			
Comply with CQC certification	Yes	Yes	Yes
Comply with ROHS certification	ROHS 2.0 / □	ROHS 2.0 / □	ROHS 2.0 / □
Comply with REACH certification	—	—	—
		nice to have	nice to have
Note: '■' indicates the function is available, '—' indicates the function is not available, and '□' indicates that the function is optional.			