

STARMEX Inverter Split type - Indoor Unit

MSXY-FP10, 13, 18, 20, 24VG / MSY-GP10, 13, 18, 20, 24VF

No.	Symptom	Operation indicator lamp	Description
1	Indoor unit and outdoor unit do not operate	Upper lamp blinks. 0.5-second ON ●○●○●○●○ 0.5-second OFF	Miswiring or serial signal <ul style="list-style-type: none"> Check miswiring and serial signal error
2		Upper lamp blinks. 2-time blink ●○●○○○○○●○●○ 2.5-second OFF	Indoor coil thermistor Room temperature thermistor <ul style="list-style-type: none"> Check indoor coil thermistor and room temperature thermistor
3		Upper lamp blinks. 3-time blink ●○●○●○○○○○●○●○●○ 2.5-second OFF	Indoor fan motor <ul style="list-style-type: none"> Check indoor fan motor
4		Upper lamp blinks. 4-time blink ●○●○●○●○○○○○●○●○●○●○ 2.5-second OFF	Indoor control system <ul style="list-style-type: none"> Replace indoor electronic control P.C. board
5		Upper lamp blinks. 5-time blink ●○●○●○●○●○○○○○●○●○●○●○ 2.5-second OFF	Outdoor power system <ul style="list-style-type: none"> Check inverter/ compressor Check stop valve
6		Upper lamp blinks. 6-time blink ●○●○●○●○●○●○○○○○●○●○●○●○ 2.5-second OFF	Outdoor thermistors <ul style="list-style-type: none"> Check outdoor thermistor
7		Upper lamp blinks. 7-time blink ●○●○●○●○●○●○●○○○○○●○●○●○●○ 2.5-second OFF	Outdoor control system <ul style="list-style-type: none"> Replace the inverter P.C. board or the outdoor electronic control P.C. board
8		Upper lamp blinks. 14-time blink or more ●○●○●○●○●○●○●○●○●○●○●○●○●○ ○●○●○●○●○●○●○●○●○●○●○●○●○ 2.5-second OFF	Other abnormality <ul style="list-style-type: none"> Check stop valve Confirm the abnormality in detail using the failure mode recall function for outdoor unit
9		Upper lamp lights up ●	Outdoor control system <ul style="list-style-type: none"> Check the blinking pattern of the LED on the inverter P.C. board or the outdoor electronic control P.C. board

STARMEX Inverter Single split - Outdoor Unit

MUY-GP10, 13, 18, 20, 24VF

No.	Symptom	LED Indication	Description
1	Outdoor unit does not operate	1-time blink every 2.5 seconds	Outdoor power system. <ul style="list-style-type: none"> ▪ Check Inverter/compressor ▪ Check stop valve
2			Outdoor thermistors <ul style="list-style-type: none"> ▪ Check outdoor thermistors
3			Outdoor control system <ul style="list-style-type: none"> ▪ Replace inverter P.C. board
4		6-time blink 2.5 seconds OFF	Serial signal <ul style="list-style-type: none"> ▪ Check miswiring and serial signal error
5		11-time blink 2.5 seconds OFF	Stop valve/ Closed valve <ul style="list-style-type: none"> ▪ Check stop valve
6		14-time blink 2.5 seconds OFF	Outdoor unit (Other abnormality) <ul style="list-style-type: none"> ▪ Check outdoor unit failure mode recall function
7		16-time blink 2.5 seconds OFF	Pipe temperature <ul style="list-style-type: none"> ▪ Replace the inverter P.C. board
8		17-time blink 2.5 seconds OFF	Outdoor refrigerant system abnormality <ul style="list-style-type: none"> ▪ Check for a gas leak in a connecting pipe etc. ▪ Check stop valve ▪ Check outdoor refrigerant circuit

STARMEX Inverter Single split - Outdoor Unit

MUY-GP10, 13, 18, 20, 24VF

No.	Symptom	LED Indication	Description
9	Outdoor unit stops and restarts 3 minutes later' is repeated	2-time blink 2.5 seconds OFF	Overcurrent protection <ul style="list-style-type: none"> ▪ Reconnect connector of compressor ▪ Check inverter/compressor ▪ Check stop valve
10		3-time blink 2.5 seconds OFF	Discharge temperature overheat protection <ul style="list-style-type: none"> ▪ Check refrigerant circuit and refrigerant amount. ▪ Check of LEV
11		4-time blink 2.5 seconds OFF	Fin temperature / P.C. board temperature thermistor overheat protection <ul style="list-style-type: none"> ▪ Check around outdoor unit. ▪ Check outdoor unit air passage. ▪ Check of outdoor fan motor.
12		5-time blink 2.5 seconds OFF	High pressure protection <ul style="list-style-type: none"> ▪ Check refrigerant circuit and refrigerant amount. ▪ Check stop valve.
13		8-time blink 2.5 seconds OFF	Compressor synchronous abnormality <ul style="list-style-type: none"> ▪ Reconnect connector of compressor. ▪ Check inverter/ compressor.
14		10-time blink 2.5 seconds OFF	Outdoor fan motor <ul style="list-style-type: none"> ▪ Check of outdoor fan motor. ▪ Check of inverter P.C. board
15		12-time blink 2.5 seconds OFF	Each phase current of compressor <ul style="list-style-type: none"> ▪ Check inverter/compressor.
16		13-time blink 2.5 seconds OFF	Bus-bar voltage (DC) It occurs with following case. Instantaneous power voltage drop. (Short time power failure) (MUYGP24) <ul style="list-style-type: none"> ▪ Check of power supply. (MUYGP24) ▪ Check inverter/compressor

STARMEX Inverter Single split - Outdoor Unit

MUY-GP10, 13, 18, 20, 24VF

No.	Symptom	LED Indication	Description
17	Outdoor unit operates	1-time blink 2.5 seconds OFF	Frequency drop by current protection Frequency drop by defrosting in COOL mode The unit is normal, but check the following.
18		3-time blink 2.5 seconds OFF	<ul style="list-style-type: none"> ▪ Check if indoor filters are clogged. ▪ Check if refrigerant is short. ▪ Check if indoor/outdoor unit air circulation is short cycled.
19		4-time blink 2.5 seconds OFF	Frequency drop by discharge temperature protection Check refrigerant circuit and refrigerant amount. <ul style="list-style-type: none"> ▪ Check of LEV. ▪ Check of outdoor thermistors
20		5-time blink 2.5 seconds OFF	Outside temperature thermistor protection <ul style="list-style-type: none"> ▪ Check of outdoor thermistors.
21		7-time blink 2.5 seconds OFF	Low discharge temperature protection <ul style="list-style-type: none"> ▪ Check of LEV ▪ Check refrigerant circuit and refrigerant amount
22		8-time blink 2.5 seconds OFF	MUY-GP10/13/15/18/20 PAM protection PAM: Pulse Amplitude Modulation This is not malfunction. PAM protection will be activated in the following cases: <ul style="list-style-type: none"> ▪ 1 Instantaneous power voltage drop. (Short time power failure) ▪ 2 When the power supply voltage is high
			MUY-GP24 Zero cross detecting circuit It occurs with following cases. <ul style="list-style-type: none"> ▪ 1 Instantaneous power voltage drop. (Short time power failure) ▪ 2 Distortion of primary voltage ▪ Check of power supply
23	9-time blink 2.5 seconds OFF	Inverter check mode <ul style="list-style-type: none"> ▪ Check if the connector of the compressor is correctly connected. ▪ Check inverter/compressor 	

STARMEX Inverter Multi Split - Outdoor Unit				MXY-2H20VF
No.	Symptom	Indication		Description
		LED1 (Red)	LED2 (Yellow)	
1	Outdoor unit does not operate	Lit	Once	LEV and drain pump. <ul style="list-style-type: none"> ▪ Check LEV ▪ Check drain pump
2		Lit	Twice	Outdoor power system <ul style="list-style-type: none"> ▪ Check the connection of the compressor connecting wire. ▪ Check Inverter/ Compressor ▪ Check stop valve
3		Lit	3 times	Discharge temperature thermistor <ul style="list-style-type: none"> ▪ Check outdoor thermistors
4		Lit	4 times	Fin temperature thermistor <ul style="list-style-type: none"> ▪ Check outdoor thermistors
5		Lit	5 times	P.C board temperature thermistor <ul style="list-style-type: none"> ▪ Replace the inverter P.C. board.
6		Lit	7 times	Ambient temperature thermistor Outdoor heat exchanger temperature thermistor <ul style="list-style-type: none"> ▪ Check outdoor thermistors
7		Lit	17 times	Nonvolatile memory data <ul style="list-style-type: none"> ▪ Replace the inverter P.C. board
8		Not lit	Not lit	Outdoor refrigerant system abnormality <ul style="list-style-type: none"> ▪ Check for gas leak in a connecting pipe ▪ Check the stop valve/ LEV ▪ Check outdoor refrigerant circuit
				<ul style="list-style-type: none"> ▪ Thermal protector protection ▪ Thermal protector is faulty ▪ Discharge temperature thermistor is not connected to the compressor ▪ Refrigerant leaks from the indoor or outdoor unit ▪ Defective operation of the stop valve (Not full open). ▪ Locked compressor

STARMEX Inverter Multi Split - Outdoor Unit				MXY-2H20VF	
No.	Symptom	Indication		Description	
		LED1 (Red)	LED2 (Yellow)		
9	Outdoor unit stops and restarts 3 minutes later' is repeated	Twice	Not lit	Overcurrent <ul style="list-style-type: none"> Reconnect compressor connector Check inverter/ compressor Check stop valve 	
10		3 times	Not lit	Discharge temperature protection <ul style="list-style-type: none"> Check the amount of gas and the refrigerant circuit. Check LEV 	
11		4 times	Not lit	Fin temperature protection P.C. board temperature protection <ul style="list-style-type: none"> Check the refrigerant circuit and the refrigerant amount Check outdoor fan motor 	
12		5 times	Not lit	High pressure protection <ul style="list-style-type: none"> Check the amount of gas and therefrigerant circuit Check the stop valve 	
13		9 times	Not lit	Bus-bar voltage protection <ul style="list-style-type: none"> Replace the inverter P.C. board 	
14		13 times	Not lit	Outdoor fan motor <ul style="list-style-type: none"> Check outdoor fan motor 	
15		8 times	Not lit	Current sensor protection <ul style="list-style-type: none"> Replace the inverter P.C. board 	
16		10 times	Not lit	Compressor <ul style="list-style-type: none"> Reconnect compressor connector Check inverter/ compressor Check the stop valve. 	

STARMEX Inverter Multi Split - Outdoor Unit

MXY-2H20VF

No.	Symptom	Indication		Description
		LED1 (Red)	LED2 (Yellow)	
17	Outdoor unit operates	Once	Lit	Primary current protection Secondary current protection Defrosting in cooling These symptoms do not mean any abnormality of the product, but check the following points.
18		Twice	Lit	
19		3 times	Lit	Discharge temperature protection <ul style="list-style-type: none"> ▪ Check the refrigerant circuit and the refrigerant amount ▪ Check LEV ▪ Check outdoor thermistors
20		4 times	Lit	Low discharge temperature protection <ul style="list-style-type: none"> ▪ Check LEV ▪ Check the refrigerant circuit and the refrigerant amount
21		5 times	Lit	Cooling high pressure protection This symptom does not mean any abnormality of the product, but check the following points. <ul style="list-style-type: none"> ▪ Check if indoor unit filters are clogged ▪ Check if refrigerant is short ▪ Check if indoor/outdoor unit air circulation is short cycled
22		8 times	Lit	Converter protection <ul style="list-style-type: none"> ▪ Check the voltage of power supply ▪ Replace the inverter P.C. board
23		Outdoor unit operates normally	7 times	Lit
24	9 times		Lit	Inverter check mode
25	Lit		Lit	Normal

STARMEX Inverter Multi Split - Outdoor Unit				MXY-3H28VG, MXY-4H33VG, MXY-4H38VG, MXY-5H48VG	
No.	Symptom	Indication		Description	
		LED1 (Red)	LED2 (Yellow)		
1	Outdoor unit does not operate	Lit	Once	LEV and drain pump. <ul style="list-style-type: none"> Check LEV Check drain pump 	
2		Lit	Twice	Outdoor power system <ul style="list-style-type: none"> Check the connection of the compressor connecting wire. Check Inverter/ Compressor Check stop valve 	
3		Lit	3 times	Discharge temperature thermistor <ul style="list-style-type: none"> Check outdoor thermistors 	
4		Lit	4 times	Fin temperature thermistor <ul style="list-style-type: none"> Check outdoor thermistors 	
5		Lit	5 times	P.C board temperature thermistor <ul style="list-style-type: none"> Replace the control P.C. board. 	
6		Lit	6 times	Ambient temperature thermistor Outdoor heat exchanger temperature thermistor <ul style="list-style-type: none"> Check outdoor thermistors 	
7		Lit	7 times	Zero cross detecting circuit (Outdoor control P.C. board) <ul style="list-style-type: none"> Replace outdoor control P.C. board 	
8		Lit	8 times	Outdoor control system <ul style="list-style-type: none"> Replace outdoor control P.C. board 	
9		Lit	8 times	Current sensor <ul style="list-style-type: none"> Replace outdoor power P.C. board 	
10		Lit	11 times	Communication error between P.C. boards <ul style="list-style-type: none"> Check the connecting wire between outdoor control P.C. board and outdoor power P.C. board 	
11		Lit	12 times	Zero cross detecting circuit (Outdoor power P.C. board) <ul style="list-style-type: none"> Replace the outdoor power P.C. board 	
12		Lit	13 times	Current sensor <ul style="list-style-type: none"> Replace the outdoor power P.C. board 	
		Lit	14 times	Voltage sensor <ul style="list-style-type: none"> Replace the outdoor power P.C. board 	

STARMEX Inverter Multi Split - Outdoor Unit				MXY-3H28VG, MXY-4H33VG, MXY-4H38VG, MXY-5H48VG	
No.	Symptom	Indication		Description	
		LED1 (Red)	LED2 (Yellow)		
13	Outdoor unit does not operate	Lit	15 times	Relay operation <ul style="list-style-type: none"> Replace the outdoor power P.C. board 	
14	Outdoor unit stops and restarts 3 minutes later' is repeated	Twice	Not lit	IPM protection Lock protection <ul style="list-style-type: none"> Reconnect compressor conenctor Check inverter/ compressor Check stop valve Check the power module (PAM module) 	
15		3 times	Not lit	Discharge temperature protection <ul style="list-style-type: none"> Check the amount of gas and refrigerant circuit Check LEV 	
16		4 times	Not lit	Fin temperature protection P.C. board temperature protection <ul style="list-style-type: none"> Check refrigerant circuit and rfrigerant amount Check outdoor fan motor 	
17		5 times	Not lit	High pressure protection Thermal protector protection <ul style="list-style-type: none"> Check around gas and the refrigerant circuit Check stop valve There is short cycle at outdoor unit High pressure switch/ thermal protector is faulty The connector is disconnected or poorly connected Discharge temperature thermistor is not connected to the compressor Refrigerant leaks from the indoor unit or outdoor unit Defective operation of stop valve (not full open) Locked compressor 	

STARMEX Inverter Multi Split - Outdoor Unit				MXY-3H28VG, MXY-4H33VG, MXY-4H38VG, MXY-5H48VG	
No.	Symptom	Indication		Description	
		LED1 (Red)	LED2 (Yellow)		
18	Outdoor unit stops and restarts 3 minutes later' is repeated	6 times	Not lit	Pre-heating protection <ul style="list-style-type: none"> ▪ Reconnect compressor connector ▪ Check inverter/ compressor ▪ Check the power module 	
19		8 times	Not lit	Converter protection <ul style="list-style-type: none"> ▪ Replace the outdoor power P.C. board 	
20		9 times	Not lit	Bus-bar voltage protection <ul style="list-style-type: none"> ▪ Check the voltag of power supply ▪ Replace the outdoor power P.C. boad or the outdoor control P.C. board ▪ Check bus-bar voltage 	
21		11 times	Not lit	Low out side temperature protection(cooling)	
22		13 times	Not lit	Outdoor fan motor <ul style="list-style-type: none"> ▪ Check outdoor fan motor 	
23		Lit	8 times	Current sensor protection <ul style="list-style-type: none"> ▪ Replace outdoor power P.C. board 	
24		Lit	11 times	Communication between P.C. boards protection <ul style="list-style-type: none"> ▪ Check the connecting wire between outdoor control P.C. board and outdoor power P.C. board 	
25		Lit	12 times	Zero cross detecting circuit (Outdoor power P.C. board) <ul style="list-style-type: none"> ▪ Replace the outdoor power P.C. board 	
26		Outdoor unit operates	Once	Lit	Primary current protection Defrosting in cooling These symptoms do not mean any abnormality of the product, but check the following points.
27	Twice		Lit	<ul style="list-style-type: none"> ▪ Check if indoor filters are clogged ▪ Check if refrigerant is short ▪ Check if indoor/ outdoor unit air circulation is short cycled 	

STARMEX Inverter Multi Split - Outdoor Unit				MXY-3H28VG, MXY-4H33VG, MXY-4H38VG, MXY-5H48VG	
No.	Symptom	Indication		Description	
		LED1 (Red)	LED2 (Yellow)		
28	Outdoor unit operates	3 times	Lit	Discharge temperature protection ■ Check refrigeran circuit and rfrigerant amount ■ Check LEV ■ Check outdoor thermistors	
29		4 times	Lit	Low discharge temperature protection ■ Check LEV ■ Check refrigerant circuit and refrigerant amount	
30		5 times	Lit	Cooling high pressure protection These symptoms do not mean any abnormality of the product, but check the following points. ■ Check if indoor filters are clogged ■ Check if refrigerant is short ■ Check if indoor/ outdoor unit air circulation is short cycled	
31		7 times	Lit	High Low Pressure bypass valve Cooling evaporating temperature drop prevention control These symptoms do not mean any abnormality of the product, but check the following points. ■ Check the indoor filters are not clogged ■ Check there is sufficient refrigerant ■ Check if indoor/ outdoor unit air circulation is not short cycled	
32	Outdoor unit operates normally	8 times	Lit	Cooling evaporating temperature protection This symptom does not mean any abnormality of the product.	
33		9 times	Lit	Inverter check mode	
34		Lit	Lit	Normal	