

EMCR潜水泵/搅拌机监控器
EMCR Monitor and Control Relay
for submersible mixer/pump

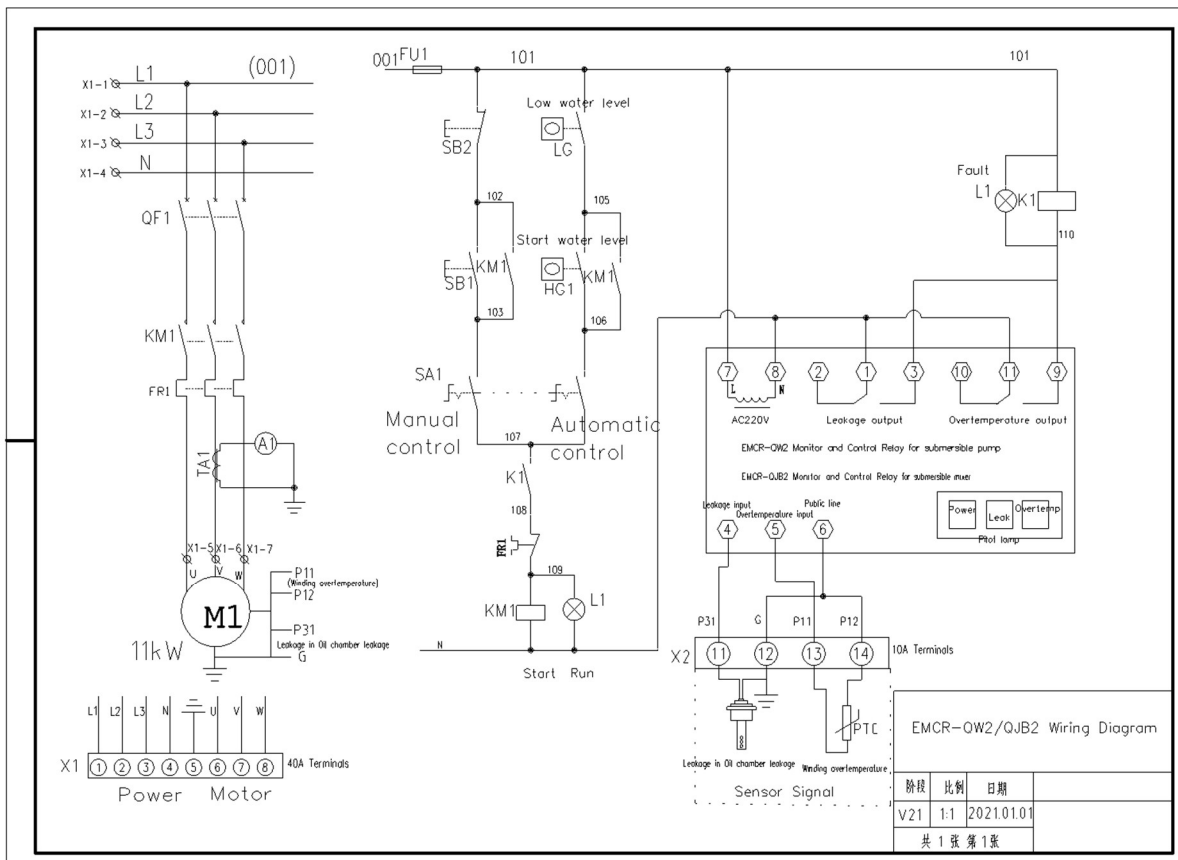
Summary

Submersible pumps and submersible mixers must be equipped with protection devices such as leakage, overheating, vibration, condensation, overload, liquid level control..... due to the characteristics of working underwater for many years.

The submersible pump protector can be used for the protection and control of submersible WQ sewage pumps/QXG clean water pumps/ZQB axial flow pumps/HQB mixed flow pumps or other similar Chinese industrial model pumps.

The submersible mixer protector can be used for the protection and control of QJB (Chinese industrial model) submersible mixer, submersible thruster, submersible aerator, submersible reflux pump or other similar low-speed diving equipment.

EMCR Monitor and Control Relay for submersible mixer/pump can be applied to the submersible pumps/mixers of Nanjing Beite, Shanghai GSD, Lanshen Group, Zenit, Ebara Machinery, Jushen Pumps, Nanfang Pumps, Shanghai Liancheng, Shupenshi, Huanan Pumps, and Kaiquan brand.



Example of wiring diagram



Technical parameter



LG-220V can control 1 submersible pump (mixer), Double detection relay for water leakage and overheating protection. Manual reset, Water leakage detection sensitivity < 20Ω (adjustable)



QW2 can control 1 submersible pump, submersible pump protector, automatic reset

QJB2 can control 1 submersible mixer, submersible mixer integrated controller, automatic reset



QW/QJB can control 2 submersible pumps (mixers) with 1-line liquid level control. For" 1 pools, 2 submersible pump (mixer) for each pool"

QW/QJB2 can control 2 submersible pumps (mixers) with 2-line liquid level control. For" 2 pools, 1 submersible pump (mixer) for each pool"

Model Name	LG-220V	QW2	QJB2	QW/QJB	QW/QJB2
Working Power	AC 220V ± 10%				
Working Temperature	-20℃ ~ 55℃	-20℃ ~ 75℃			
Working Humidity	Less than 95% no condensation				
Work Environment	Non corrosive gas				
Power Dissipation	≤ 5W				
Contact Rating	5A 250VAC	5A 250VAC	5A 250VAC	5A 250VAC	7A 250VAC
Sensor Power	DC 12V				
Externall Dimensions (mm)	45*82*110	48*48*110	48*48*110	110*90*75	115*90*75
Installation Method	DIN35 Guide				
Weight (kg)	0.3	0.3	0.3	0.39	0.39
Leak Detection	1 line	1 line	1 line	1 line *2	1 line *2
Overheat Detection	1 line	1 line	1 line	1 line *2	1 line *2
PT100 temperature detection	/	/	/	/	/
Humidity signal	/				
Dehumidification control	/				
Liquid level signal	/	/	/	1 line *1	1 line *2
Overload signal	/			1 line *2	
Run timing	/				
4-20mA Input	/				
Insulation impedance detection	/				
Reset mode	Manual	Automatic	Automatic	Automatic	Automatic
Communication mode	/				
Differential signal output	/	NO、NC	NO、NC	YES	YES
Alarm signal output	/				
Total fault output	NO	/	/	(NO NC) * 2	(NO NC) * 2
Display mode	LED Indicate	LED Indicate	LED Indicate	LED Indicate/Digital	LED Indicate
Remarks	/	For submersible pump	For submersible mixer	One-control-Two	One-control-Two



Model Name	QBD-II	QBDN-II	QBD-II	QBD-IIa	QW/QJB2
Working Power	AC 220V ± 10%				
Working Temperature	-20℃ ~ 75℃				
Working Humidity	Less than 95% no condensation				
Work Environment	Non corrosive gas				
Power Dissipation	≤ 2W		≤ 5W		
Contact Rating	5A 250VAC	5A 250VAC	5A 250VAC	5A 250VAC	5A 250VAC
Sensor Power	DC 12V				
Externall Dimensions (mm)	146*110*64	85*110*62	80*48*120	48*80*120	80*50*132
Installation Method	DIN35 Guide				
Weight (kg)	0.39	0.33	0.3	0.26	0.21
Leak Detection	1 line	1 line		1 line	1 line
Overheat Detection	2 lines	2 lines	2 lines	1 line	2 lines
PT100 temperature detection	2 lines	/	/	/	/
Humidity signal	1 line				
Dehumidification control	/				
Liquid level signal	/				
Overload signal	1 line DI		/		
Run timing	1 line	1 line		/	
4-20mA Input	2 lines		/		
Insulation impedance detection	/				
Reset mode	Manual	Automatic	Automatic	Automatic	Automatic
Communication mode	■ 2 lines	■ 2 lines	/		
Differential signal output	YES	YES	YES	YES	/
Alarm signal output	/				
Total fault output	NC	NC	NC	NC	NO NC
Display mode	LED Indicate ■ 7" touch screen	LED Indicate ■ 7" touch screen	LED Indicate	LED Indicate/Digital	LED Indicate
Remarks	Touch screen (option)	Touch screen (option)			

Model Name	BH2098	MSC-P10	BH1000	BH600	BH800
Working Power	AC 220V ± 10%				
Working Temperature	-20℃ ~ 75℃				
Working Humidity	Less than 95% no condensation				
Work Environment	Non corrosive gas				
Power Dissipation	≤ 10W				
Contact Rating	5A 250VAC				
Sensor Power	DC 12V				
Externall Dimensions (mm)	120*120*80	67*107*75	160*80*78	107*107*60	158*107*60
Installation Method	Opening 112*112	DIN35 Guide	Opening 151*75	DIN35 Guide	DIN35 Guide
Weight (kg)	0.76	0.38	0.7	0.7	0.8
Leak Detection	3 lines	8 lines	3 lines	3 lines	3 lines
Overheat Detection	1 line	8 lines	/	2 lines	2 lines
PT100 temperature detection	6 lines	10 lines	5 lines	2 lines	12 lines
Humidity signal	■ HM1500	2 lines	/	Multiplex	1 line
Dehumidification control	/	2 lines	/	Multiplex	1 line
Liquid level signal	/	4 lines	/	Multiplex	2 lines
Overload signal	/	4 lines	/	Multiplex	YES
Run timing	YES	YES	/	YES	YES
4-20mA Input	/	4 lines	/	/	3 lines
Insulation impedance detection	/				
Reset mode	Manual/Automatic	Automatic	Manual	Manual	Manual
Communication mode	■ RS485	2 lines	YES	2 lines	4 lines
Differential signal output	/	/	/	7 lines	/
Alarm signal output	NO NC	YES	YES	YES	YES
Total fault output	N4 NC	N3 NC	N2 NC	N1 NC	NO NC
Display mode	LED Indicate touch screen	LED Indicate touch screen	LED Indicate touch screen	LED Indicate touch screen	LED Indicate touch screen
Remarks		7" Touch screen (option)			



Model Name	KQ	KQ8	KQ500-E	KQ510	KQ1010
Working Power	AC 220V ± 10%				
Working Temperature	-20°C ~ 75°C				
Working Humidity	Less than 95% no condensation				
Work Environment	Non corrosive gas				
Power Dissipation	≤ 5W		≤ 5W	≤ 5W	≤ 8W
Contact Rating	5A 250VAC	5A 250VAC	5A 250VAC	1A 250VAC	5A 250VAC
Sensor Power	DC 12V				
Externall Dimensions (mm)	115*90*75	115*90*75	45*75*105	90*75*60	115*90*72
Installation Method	DIN35 Guide				
Weight (kg)	0.34	0.35	0.23	0.21	0.34
Leak Detection	3 lines	5 lines	2 lines	3 lines	3 lines
Overheat Detection	1 line	3 lines	1 line	1 line	1 line
PT100 temperature detection	/	/	/	/	2 lines
Humidity signal	/	YES*	/	/	/
Dehumidification control	/	YES*	/	/	/
Liquid level signal	/	/	1 line	/	/
Overload signal	/				
Run timing	/				
4-20mA Input	/				
Insulation impedance detection	/				
Reset mode	Automatic	Automatic	Manual/Automatic	Automatic	Automatic
Communication mode	/	/	/		
Differential signal output	YES	YES	/	/	/
Alarm signal output	/				
Total fault output	NO NC	NC	NO NC	NO NC	NO NC
Display mode	LED Indicate	LED Indicate	LED Indicate	LED Indicate	LED Indicate/Digital
Remarks		Dehumidification (optional)			Alarm temp can be set

Model Name	LB01	LB-220V	GB-220V	MINI MAPE	JR10-1
Working Power	AC 220V ± 10%				
Working Temperature	-20°C ~ 75°C				
Working Humidity	Less than 95% no condensation				
Work Environment	Non corrosive gas				
Power Dissipation	≤ 5W				
Contact Rating	5A 250VAC				
Sensor Power	DC 12V			DC 24V	DC 12V
Externall Dimensions (mm)	48*82*127	48*82*129	80*48*120	48*82*110	48*82*139
Installation Method	DIN35 Guide				
Weight (kg)	0.23	0.23	0.23	0.23	0.23
Leak Detection	1 line	1 line	/	1 line	/
Overheat Detection	/	/	1 line	1 line	1 line
PT100 temperature detection	/	/	/	/	/
Humidity signal	/				
Dehumidification control	/				
Liquid level signal	/				
Overload signal	/				
Run timing	/				
4-20mA Input	/				
Insulation impedance detection	/				
Reset mode	Automatic	Automatic	Automatic	Manual	Automatic
Communication mode	/				
Differential signal output	/				
Alarm signal output	/				
Total fault output	NO NC	NO NC	NO NC	/	NC
Display mode	LED Indicate	LED Indicate	LED Indicate	LED Indicate	/
Remarks					