### JCM. **Single-Phase Line** Voltage Monitors

Antishort cycle protection. Detect high/low voltage. 32MY19 adds surge protection.

3.1			N.O.		
Description	Voltage	Time Delay	Output (A)	Mfr. Model	ltem No.
1-Ph., ASC Protection	95 to 270	Adj. 6 to 600 Sec.	5 A	ICM491	3UW94
1-Ph., Programmable	80 to 300	Adj. 0 to 720 Sec.	10 A	ICM492	5KPX9
1-Ph., Surge Arrestors	200 to 250	0 to 10 min	40 A	ICM493 ICM494	32MY19 32MY20

\* Replacement board only for 32MY19.

## **JCW Plug-In 3-Phase** Line Voltage Monitor



5KDY9

Protects 3-phase motors and equipment from voltage faults. LED indicates high/low/unbalanced voltage, phase loss/reversal, and power interruptions. 100-msec response time. 50/60 Hz.

% Volts Mfr. N.0 NC Item Voltage 190-480V Output (A) Output (A) Unbalance Model No. 2-8 User Select 10 A 10 A ICM408 6JYL2 AC 2 to 20, Adj. 10 A ICM455 32MY21 6 A

# 3-Phase Line Voltage Monitors

UL Recognized E60605

Can detect voltage imbalance, high/low voltage, phase loss, reversal, incorrect sequencing, and rapid short cycling. 3UW93 has programmable 25-fault memory storage. Independent high/low voltage settings.

2ELT2

Turbo 2

		J			g			Cross-Re	ference*					
	Volts	% Volts	Control	N.O.	NC	Diversified	Motorsaver	SSAC	TimeMark	Wagner	Watsco	Mfr.	Item	
Display	50/60 Hz	Unbalance	Volts (AC)	Output (A)	Output (A)	Model	Model	Model	Model	Model	Model	Model	No.	
LCD				10 A	6 A	AC-2020,					EAC-800	ICM450	3UW93	3UW93
_	190-630	2 to 25, Adj.	18 to 240	20 A	10 A	AC-301, AC-302	455	QLM/QLV	265	WPC-800	EAC-8000	ICM400	3UW89	
* Dhuoid	al dimono	iono voru hu n	anufaatura											-

Physical dimensions vary by manufacturer



### **Universal Capacitors**

1/4" brass-plated dual male terminals for best reliability, conductivity and corrosion resistance. Includes jumper wires to combine individual values into desired MFD rating. 60/50 Hz.

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Description	MFD (µ) Rating	Cap. Voltage	Dia.	Case Height	Mfr. Model	ltem No.
Motor Dup	2.5-67.5	370/440V AC	2 ½ in	4 ½ in	Turbo 200	2ELT2
Motor Run - Capacitor -	5-97.5	370/440V AC	2 1/2 in	5 ¾ in	Turbo 200X	2ELT3
	2.5-15	370/440V AC	1 ¾ in	2 5⁄16 in	Turbo 200 Mini	2ELT4
Motor Start Canacitor	23-302	330V AC	2 ½ in	6 in	Turbolytic 50	2ELT5

### **Refrigeration and Air Conditioner** Start Assist Kits

32ZN44 to 32ZN46 can reduce air conditioner compressor start-up time up to 50% and lower energy consumption. 4E239 to 4E241 are for residential and commercial air conditioning units, heat pumps, and room air conditioners. 4MG78 replaces 3-wire potential relay and capacitor. 4E238 is used with residential and commercial refrigerators and freezers. 20LP97 to 20LP99 allow OEM-style, 3-wire installation and are for single-phase air conditioner or refrigeration units and hard-starting compressors under low voltage conditions.

COMPRE	SSOR SAVER	$\sim$	ONTROLS	Supa			
For Use With Compressors	HP	Voltage	Brand	Mfr. Model	ltem No.		24
1-3 tons A/C Units	4 to 5	208 to 240		CSRU1	32ZN44		
3.5-4-5 tons A/C Units	3.5 to 5				32ZN45		
4-5 tons A/C Units	4 to 5	208 to 240		CSRU3	32ZN46		
Compressors	1/12 to 5	90 to 240	ICM	ICM866U	32MY24		
	1⁄2 to 10	90-277	_	SPP5	4E239	45000	1.1
PSC & CSIR	1/2 to 10	90-277	-	SPP6	4E240	4E238	
1 30 & 0311	1 to 10	170-277	-	SPP8E	4MG78		
	1½ to 10	90-277	-	SPP7S	4E241		Section By
Reciprocating, Scroll, & Rotary	1 to 3	208-265		MPR5	12H941		
Theorem of the second s	3½ to 5	208-265	Supco	MPR1	12H940		Par Par
RSIR, CSIR, PSC, & CSR	1/12 to 1/5	115	-	RC0810	13E401		
- / //	1/4 to 1/3	115	-	RC0410	4E238		Talana
Hard Start with Low Voltage	1 to 3	208 to 240		3W1	20LP97		Station 31
Situations, Single Phase Air	31/2 to 41/2			3W2	20LP98		- I I I I I I I I I I I I I I I I I I I
Conditioner or Refrigeration Unit	4 to 5	208 to 240		3W3	20LP99		

Johnson 🐠

**Head-Pressure Controls** ICM—Feature high-temp. bypass, heat pump override, and adjustable hard-start timing and motor cutout speed. Indicator lights for full or modulated motor voltage. 4MG74 and 5KPX8 require separate 24VAC source: 4MG75 and 4MG76 have built-in 24VAC transformer.

#### Johnson Controls—

R410A compatible. Weather-resistant, durable motor speed controls for approved single-phase, PSC motors commonly used in many refrigeration and air conditioning condenser fan applications. 20XJ08 allows easy configuration of P266 Series controllers via a PC.



4MG75

**HVAC & REFRIGERATION** 

Line Voltage Monitors & Controls

Input Volts AC @ 60/50 Hz	Triac Output Amps	Hard Start Timing (sec.)	Brand	Mfr. Model	ltem No.
120 to 480	0.1 to 10.0	0.1 to 5.0		ICM325HNC	4MG74
120 to 240	0.1 to 10.0	0.1 to 5.0	ICM	ICM326HNC	4MG75
120 to 600	10	.1 - 5		ICM333	5KPX8
	8	2 sec		P266AAA-100C	20XJ06
208/240	8	2 sec	Johnson Controls	P266ABA-100C	40G351
	8	2 sec		P266ACA-100C	40G352
	4	2 sec	- Johnson Controls	P266BCA-100C	40G353
460/575	4	2 sec		P266BHA-100C	40G354
	4	2 sec		P266BHA-2K	20XJ07
480	0.1 to 10.0	0.1 to 5.0	ICM	ICM327HNC	4MG76
ccessories					
Pressure Transduc	er, 0 to 508 PSI			P266SNR-1C	40G355
Pressure Transduc	er, 0 to 754 PSI		Johnson Controls	P266SNR-2C	40G356
Coffuero for DOCC	Condenser Fan Speed	Control		P266PRM-1K	20XJ08

#### **Bypass Timer** Universal input voltage:

18-240VAC, 1A, 10A inrush Bypasses a low-pressure switch or an oil-pressure switch on startup.

Time Mfr Item Delay 10-1000 Model ICM175 3UW85 Seconds



**Surge Protectors/Arrestors** 

#### 1-phase, 120-240V Meet UL standards

<u>\_\_\_</u>1

Protect air conditioners, generators, motors, and appliances from power surges and lightning. 32ZN47 has an LED showing that surge protection is present, and a second LED indicating that device has power and is properly grounded.



Max. Surge Current Per Phase Mfr Item D Brand Model No 100 kA .78 2.16 in ICM CM5 32MY23 5-2-1 Compressor Saver 60 kA 4 98 in 3 48 in 1 8 in SPD60 327N47

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