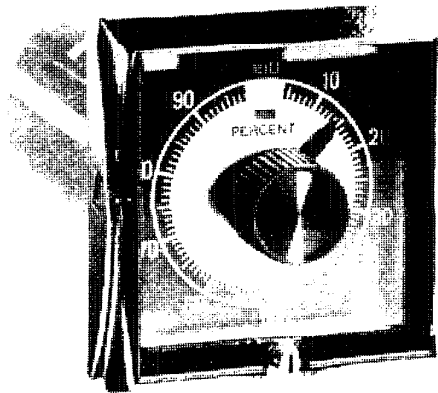


TIME CONTROL



BULLETIN 129

The HQ9 Percentage Timer for use where Repetitive "ON" time of a fixed cycle is to be varied.



The HQ9 offers accurate, efficient control for many industrial applications. A few of these are: Motor Control, Electric Heaters, Ovens, Program Temperature Controls, Chemical Feeding, Lubrication Systems.

Standard features include an electrically isolated pilot light and a cycle progress pointer.

The HQ9 Percentage Timer is compatible with the Cycl-Flex Series featuring the unique plug-in mounting.

OPERATION

A synchronous motor driven cam closes a snap action switch for a percentage of the total time cycle. Settings may be made or changed with the timer operating. Relationship of switch transfer point at zero and desired interval is made by adjustment of the setting pointer. As the progress pointer passes zero, the load switch transfers. The HQ9 continues to operate as a repeat cycle timer as long as power is supplied to the motor. "ON" time is adjustable from 5% to 100% of the total time range. Load connections are made to terminals 4 and 3.

SPECIFICATIONS

Standard Time Ranges

Symbol	Time Range
01	15 Seconds
02	30 Seconds
03	60 Seconds
04	120 Seconds
06	5 Minutes
08	15 Minutes
09	30 Minutes
10	60 Minutes
11	120 Minutes
14	20 Hours

Voltage/Frequency

120 V (+10, -15%), 50/60 Hz
240 V (+10, -15%), 50/60 Hz

Contact Rating

10 Amps at 120/240 VAC
1/3 H.P. at 125/250 VAC
1/2 Amp at 125 VDC
1/4 Amp at 250 VDC

Settability

± 1%

Timer Burden

4 Va.

Operating Temperature

-10° to +140°F (-23° to +60°C)

Laboratory Testing

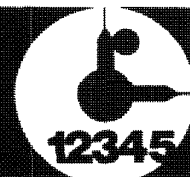
U.L. Recognition E-61735
C.S.A. Certification LR-26861

NOTE: Because of precise adjustment and calibration procedures, it is recommended that all repair or part replacement be done at the factory.

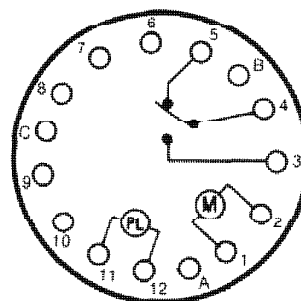
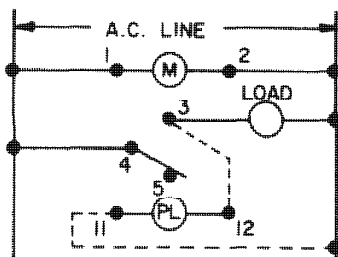
Eagle Signal Controls

A Mark IV Industries Company
8004 Cameron Road, Austin, Texas 78753 U.S.A.

TIME CONTROL

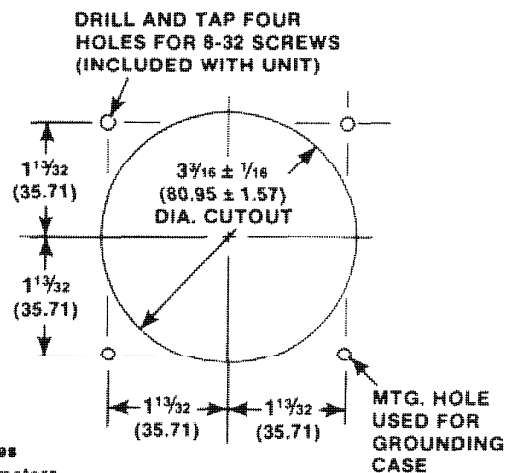
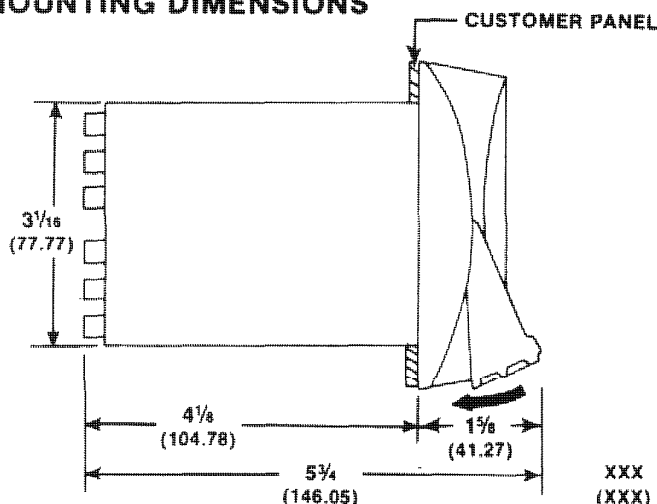


WIRING DIAGRAMS



Standard CW Dial References the operation of the load when connected to terminal number 3. "ON Time" adjustable 5% to 100%.

MOUNTING DIMENSIONS



XXX = Inches
(XXX) = Millimeters

ORDERING INFORMATION

Consult Eagle for availability of other time ranges, voltages, and frequencies.

Time Range						Voltage/Frequency		Features	
Sym	Sec	Sym	Min	Sym	Hrs	Sym	Description	Sym	Description
01	15	06	5	10	1	A5	120V 50 Hz	02	Timer only modified for mounting in NEMA VII explosion proof housing
02	30	08	15	11	2	A6	120V 60 Hz	07	Dial Lock
03	60	09	30	14	20	B5	240V 50 Hz		
04	120					B6	240V 60 Hz		

60 cycle units can be used for 50 cycle application, however, the motor will run 1/6 slow.

Request Bulletin 329E for timer motor chart.



PARTS LIST
HQ9 Series
Percentage Timer

BULLETIN 329E

Symbol	Time Range	Motor Speed	MOTORS			
			120/60	120/50	240/60	240/50
01	15 Sec	4 RPM	4135-1941	4135-1791	4135-1801	4135-1811
02	30 Sec	2 RPM	4135-2071	4135-1921	4135-1911	4135-1931
03	60 Sec	1 RPM	PMH-79	PMH-78	PMH-82	PMH-81
04	120 Sec	1/2 RPM	PMH-85	PMH-84	PMH-88	PMH-87
05	4 Min	1/4 RPM	4134-0721	4134-1201	4134-1211	4134-1161
06	5 Min	1/5 RPM	PMH-259	PMH-258	PMH-262	PMH-261
07	10 Min	0 RPH	PMH-103	PMH-102	PMH-106	PMH-105
08	15 Min	4 RPH	PMH-115	PMH-114	PMH-118	PMH-117
09	30 Min	2 RPH	PMH-127	PMH-126	PMH-130	PMH-129
10	60 Min	1 RPH	PMH-133	PMH-132	PMH-136	PMH-135
11	120 Min	1/2 RPH	4132-0291	PMH-138	PMH-142	PMH-141
12	4 Hr	1/4 RPH	4131-0371	*	4131-0241	*
13	8 Hr	1/8 RPH	4131-0421	4131-0501	*	*
14	20 Hr	1/20 RPH	4131-0441	*	*	*

* Demand has not warranted P/N assignment.

Because of precise adjustment and calibration procedures, it is recommended that defective timers be returned to our factory for repair or replacement.

Eagle Signal Controls

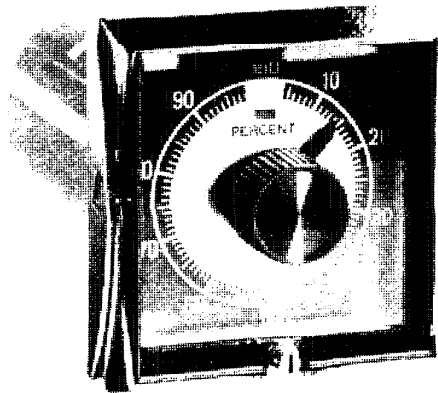
A Mark IV Industries Company
 8004 Cameron Road, Austin, Texas 78753 U.S.A.

PRINTED U.S.A. REVISED 2/75

TIME CONTROL



The HQ9 Percentage Timer for use where Repetitive "ON" time of a fixed cycle is to be varied.



The HQ9 offers accurate, efficient control for many industrial applications. A few of these are: Motor Control, Electric Heaters, Ovens, Program Temperature Controls, Chemical Feeding, Lubrication Systems.

Standard features include an electrically isolated pilot light and a cycle progress pointer.

The HQ9 Percentage Timer is compatible with the Cycl-Flex Series featuring the unique plug-in mounting.

OPERATION

A synchronous motor driven cam closes a snap action switch for a percentage of the total time cycle. Settings may be made or changed with the timer operating. Relationship of switch transfer point at zero and desired interval is made by adjustment of the setting pointer. As the progress pointer passes zero, the load switch transfers. The HQ9 continues to operate as a repeat cycle timer as long as power is supplied to the motor. "ON" time is adjustable from 5% to 100% of the total time range. Load connections are made to terminals 4 and 3.

SPECIFICATIONS

Standard Time Ranges

Symbol	Time Range
01	15 Seconds
02	30 Seconds
03	60 Seconds
04	120 Seconds
06	5 Minutes
08	15 Minutes
09	30 Minutes
10	60 Minutes
11	120 Minutes
14	20 Hours

Voltage/Frequency

120 V (+10, -15%), 50/60 Hz
240 V (+10, -15%), 50/60 Hz

Contact Rating

10 Amps at 120/240 VAC
1/3 H.P. at 125/250 VAC
1/2 Amp at 125 VDC
1/4 Amp at 250 VDC

Settability

± 1%

Timer Burden

4 Va.

Operating Temperature

-10° to +140°F (-23° to +60°C)

Laboratory Testing

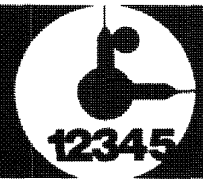
U.L. Recognition E-61735
C.S.A. Certification LR-26861

NOTE: Because of precise adjustment and calibration procedures, it is recommended that all repair or part replacement be done at the factory.

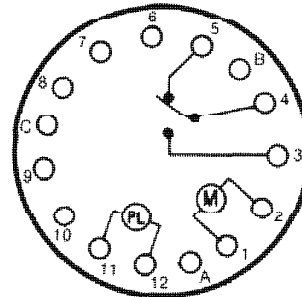
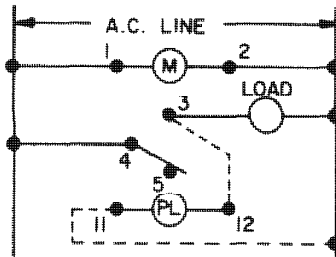
Eagle Signal Controls

A Mark IV Industries Company
8004 Cameron Road, Austin, Texas 78753 U.S.A.

TIME CONTROL

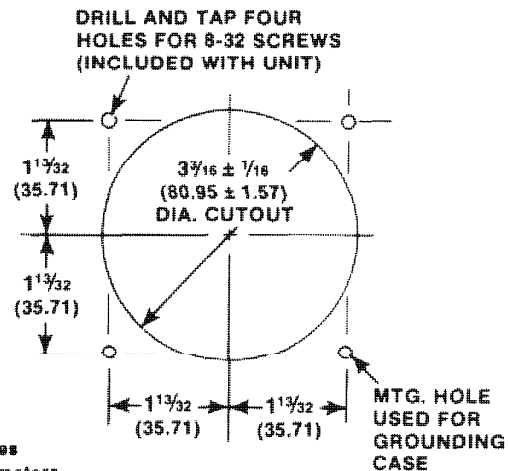
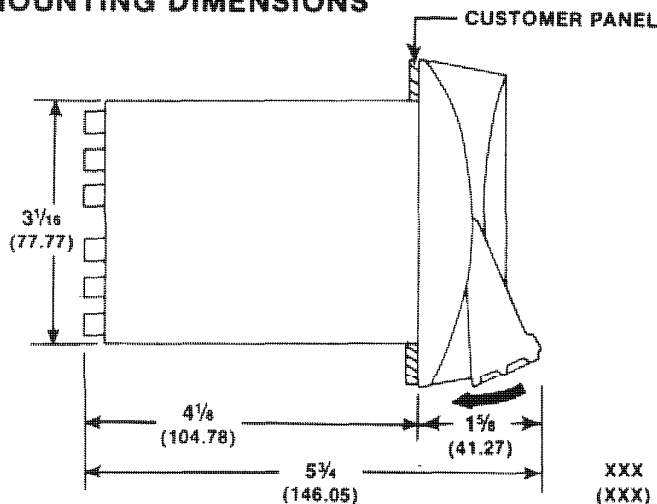


WIRING DIAGRAMS



Standard CW Dial References the operation of the load when connected to terminal number 3. "ON Time" adjustable 5% to 100%.

MOUNTING DIMENSIONS



XXX = Inches
(XXX) = Millimeters

ORDERING INFORMATION

Consult Eagle for availability of other time ranges, voltages, and frequencies.

Time Range						Voltage/Frequency		Features	
Sym	Sec	Sym	Min	Sym	Hrs	Sym	Description	Sym	Description
01	15	06	5	10	1	A5	120V 50 Hz	02	Timer only modified for mounting in NEMA VII explosion proof housing
02	30	08	15	11	2	A6	120V 60 Hz	07	Dial Lock
03	60	09	30	14	20	B5	240V 50 Hz		
04	120					B6	240V 60 Hz		

60 cycle units can be used for 50 cycle application, however, the motor will run 1/6 slow.

Request Bulletin 329E for timer motor chart.



PARTS LIST **HQ9 Series** **Percentage Timer**

Symbol	Time Range	Motor Speed	MOTORS			
			120/60	120/50	240/60	240/50
01	15 Sec	4 RPM	4135-1941	4135-1791	4135-1801	4135-1811
02	30 Sec	2 RPM	4135-2071	4135-1921	4135-1911	4135-1931
03	60 Sec	1 RPM	PMH-79	PMH-78	PMH-82	PMH-81
04	120 Sec	1/2 RPM	PMH-85	PMH-84	PMH-88	PMH-87
05	4 Min	1/4 RPM	4134-0721	4134-1201	4134-1211	4134-1161
06	5 Min	1/5 RPM	PMH-259	PMH-258	PMH-262	PMH-261
07	10 Min	0 RPH	PMH-103	PMH-102	PMH-106	PMH-105
08	15 Min	4 RPH	PMH-115	PMH-114	PMH-118	PMH-117
09	30 Min	2 RPH	PMH-127	PMH-126	PMH-130	PMH-129
10	60 Min	1 RPH	PMH-133	PMH-132	PMH-136	PMH-135
11	120 Min	1/2 RPH	4132-0291	PMH-138	PMH-142	PMH-141
12	4 Hr	1/4 RPH	4131-0371	*	4131-0241	*
13	8 Hr	1/8 RPH	4131-0421	4131-0501	*	*
14	20 Hr	1/20 RPH	4131-0441	*	*	*

* Demand has not warranted P/N assignment.

Because of precise adjustment and calibration procedures, it is recommended that defective timers be returned to our factory for repair or replacement.

Eagle Signal Controls

A Mark IV Industries Company
 8004 Cameron Road, Austin, Texas 78753 U.S.A.