



CLIP

INDUSTRIAL AUTOMATION



models

CLE, CLE-2R, CLES, CLR, CLY, CLC, CLC-2R, CLI, CLBE, CLM, CLZ, CLF-2R, CLU

DIGITAL ELECTRONIC TIMERS

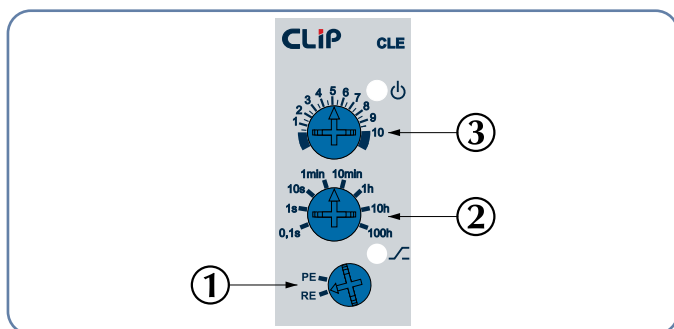
Rev. 7

DESCRIPTION

Compact, the housing in ABS material V0 (anti-flame) has high resistance to shocks and vibrations, fixation on DIN 35 mm rail and configuration of functions and scales by buttons on the front.

The equipment was developed with a totally digital concept, allowing greater precision to the machines in which it is applied, designed and assembled with SMD technology. It has power indication (green LED) and relay output status (red LED) and wide power range (12Vac / Vdc or 24~ 242Vac / Vdc) allowing the use of a single model in the most diverse functions.

SCALE / FUNCTION ADJUSTMENT



1. Function Selection.
2. Full Scale Time Selection.
3. Current Time Selection.

Example: RE function, 7s time.

- Set function button on RE
- Set full scale time button on 10s.
- Set current time button on 7.
- Turn the product off and on.

IMPORTANT: SWITCH OFF AND ON TO RECOGNIZE THE CHANGE OF:

FUNCTION
FULL SCALE TIME
(RATCHED BUTTONS)

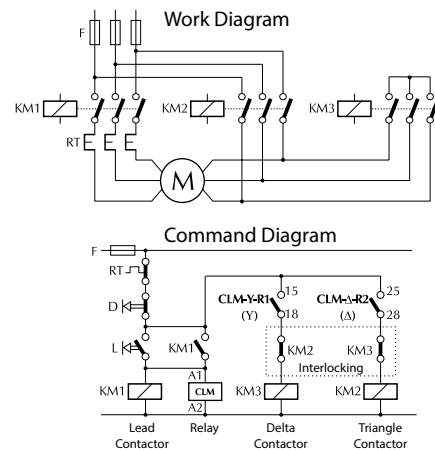
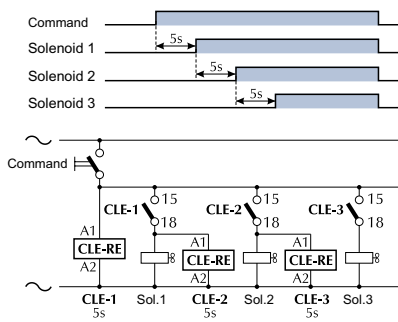
	FUNCTIONS	FUNCTIONS WITHOUT EXTERNAL COMMAND INPUT	FUNCTIONS WITH EXTERNAL COMMAND INPUT	CLE	CLE-2R	CLES	CLR	CLC	CLC-2R	CLF-2R	CLY	CLU	CLZ	CLI	CLBE	CLM
	RE (POWER ON DELAY)			X	X		X									X
	RE + INSTANTENEOUS (POWER ON DELAY)					X										
	RE (PULSE ON POWER ON)			X	X		X									X
	RE + INSTANTENEOUS (PULSE ON POWER ON)					X										
	PE (PULSE EXTENDER WITH FALLING EDGE)															X
	I (PULSE EXTENDER WITH RISING EDGE)													X		
	I (PULSE EXTENDER WITH FALLING EDGE)													X		X
	BE (BI-STABLE WITH RISING EDGE)														X	X
	BE (BI-STABLE WITH FALLING EDGE)														X	
	Y (STAR-DELTA)										X					X
	C (CYCLIC WITH INDEPENDENT TIMES)							X	X							
	C (CYCLIC WITH EQUAL TIMES)															X
	P (PROPORTIONAL)															X
	F (PULSE GENERATOR)									X						
	U (PULSE ON POWER ON AND POWER OFF)											X				
	RE (POWER OFF DELAY)												X			
INPUT / OUTPUT	DISTANCE TIME SETTING															X
	EXTERNAL COMMAND INPUT															X
	1 SPDT RELAY			X			X	X				X	X	X	X	
	2 SPDT RELAY				X	X			X	X	X					
RANGE	1 SPDT + 1 SPST RELAY															X
	0,1s, 1s, 10s, 1 min, 10 min, 1 h, 10 h, 100 h			X	X	X		X	X					X		X
	1s, 3s, 6s, 15s, 30s, 60s, 100s, 15 min						X									
	1s, 3s, 5s, 6s, 15s, 30s, 60s, 100s										X					
	3s, 15s, 30s, 60s, 1,5 min, 3 min, 6 min, 10 min													X		
20 TO 80 PULSES / min									X							
	FUNCTIONS	FUNCTIONS WITHOUT EXTERNAL COMMAND INPUT	FUNCTIONS WITH EXTERNAL COMMAND INPUT	CLE	CLE-2R	CLES	CLR	CLC	CLC-2R	CLF-2R	CLY	CLU	CLZ	CLI	CLBE	CLM

INSTALLATION INSTRUCTIONS

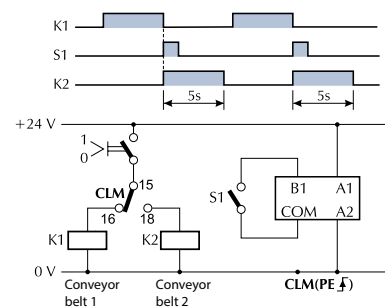
CLY Application Example - Star Delta Start up

CLE Application Example - RE Function

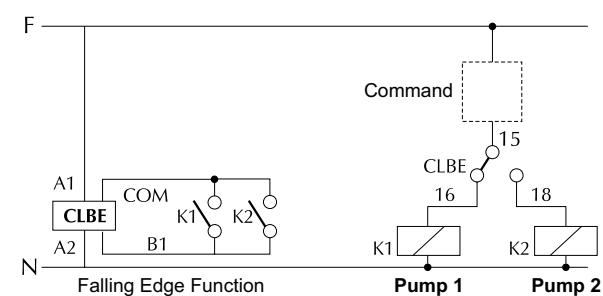
Application: Sequential actuation of solenoid valves



CLM Application Example - PE Function



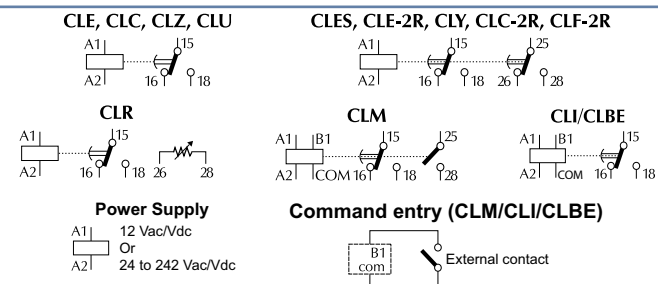
CLBE Example application to switch drive of 2 pumps.



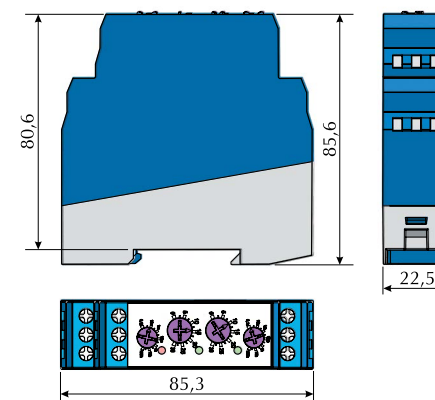
TECHNICAL SPECIFICATIONS

Power Supply	-	12 Vac / Vdc; 24 ~ 242 Vac / Vdc
Frequency	Hz	48 ~ 63
Approximate consumption	VA	3.5
Accuracy	% FS	3.0
Repeatability accuracy	%	1.0
Minimum reset time	ms	100
Minimum power up time for CLZ	s	0.5s for scales up to 3min; 5s for ranges up to 10min
Immunity to electrical disturbance	-	IEC 61000-4-2 IEC 61000-4-4 IEC 61000-4-5
Output relay capacity	A	5 (250 Vca / cos φ = 1)
Contact Life	operations	100,000 with load
Ambient temperature:	storage/°C	-10 ~ + 65
	operation/°C	0 ~ 50
Air relative Humidity	% HR	35 ~ 85 (non-condensing)
Protection degree	housing	IP 40
	terminals	IP 20
Terminal and box isolation		1000 MΩ / 500 Vdc
Insulation Voltage	Vca/min	2200 / 1
Box material	-	Self-extinguishing ABS
Connection Terminals	-	screw connector (maximum conductor size: 4 mm ²)
Fastening Type	-	DIN rail 35 mm to EN 50022
Approximated weight	grams	120

CONNECTION DIAGRAMS



DIMENSION (MM)



MODELS TO ORDER

Modelo	Function	Power Supply	Contacts	Housing
CLE	Pulse or delay on power up	12 Vac/Vdc or 24...242 Vac/Vdc	1 SPDT Relay	22,5 mm
CLE-2R	Pulse or delay on power up	12 Vac/Vdc or 24...242 Vac/Vdc	2 SPDT relays	22,5 mm
CLES	Pulse or delay on energization with instantaneous relay 2	12 Vac/Vdc or 24...242 Vac/Vdc	2 SPDT relays	22,5 mm
CLR	Delay or Pulse on power with distance adjustment	12 Vac/Vdc or 24...242 Vac/Vdc	1 SPDT Relay	22,5 mm
CLY	Star-triangle start up	12 Vac/Vdc or 24...242 Vac/Vdc	2 SPDT relays	22,5 mm
CLC	Cyclic timing with independent adjustable times and scales	12 Vac/Vdc or 24...242 Vac/Vdc	1 SPDT Relay	22,5 mm
CLC-2R	Cyclic timing with independent adjustable times and scales	12 Vac/Vdc or 24...242 Vac/Vdc	2 SPDT relays	22,5 mm
CLI	pulse extender on falling or rising edge	12 Vac/Vdc or 24...242 Vac/Vdc	1 SPDT Relay	22,5 mm
CLBE	Bi-stable (reverses relay condition)	12 Vac/Vdc or 24...242 Vac/Vdc	1 SPDT Relay	22,5 mm
CLZ	Delay in power off	12 Vac/Vdc or 24...242 Vac/Vdc	1 SPDT Relay	22,5 mm
CLF-2F	Pulsing Cyclic Timing (Pulse Generator)	12 Vac/Vdc or 24...242 Vac/Vdc	2 SPDT relays	22,5 mm
CLU	Pulse (0.5 second) on power up and/or power off	12 Vac/Vdc or 24...242 Vac/Vdc	1 SPDT Relay	22,5 mm
CLM	Delay, Pulse, Pulse Extender (2 functions), Bi-stable, Star-Delta, Cyclic with symmetrical times, Proportional.	12 Vac/Vdc or 24...242 Vac/Vdc	1 SPDT Relay + 1 SPST Relay	22,5 mm

