# RAIL MOUNTED AMMETER DOL-Q3B



## Precautions For Installation and Safe Use

Failure to follow those instructions will result in death or serious injury.

• Disconnect all power before working on equipment.

• When the device is connected to the network, do not remove the front panel.

- Do not try to clean the device with solvent or the like. Only clean the device with a dried cloth.
- Verify correct terminal connections when wiring.
   Electrical equipment should be serviced only by your compedent seller.

Only for rack panel mounting.

No responsibility is assured by the manufacturer or any of its subsidiaries for any consequences arising out of the use of this material.

# DOL-Q3B (Ammeter With Setpoint):

DOL-Q3B is designed to measure RMS value of AC current which flows from the line and saving the instant and average demands. The current transformer ratio can be set between 5/5A and 10000/5A by the buttons on the panel. Settings and demands remain stored in the memory when the power supply is OFF, and the ammeter continues its function by this stored value when the power supply is ON.

DOL-Q3B measures the RMS value of AC current which flows from the line. If the measured AC current is over the high setpoint, or it is under the low setpoint, output relay is activated at the adjusted time delay.

\* Important Notice: The secondary of current transformer is limited at 5A.

## Demands:

Maximum average current value are stored. It can be read or deleted by user. Demand value remains stored, when the power supply is off. Seen demand at the display is avarage of the demands in demand time.

#### Peak value:

The maximum instant current value are stored. It can be read or deleted by user.

## Setpoint (5PHve5PL):

When the AC current which flows through the device is over the high setpoint value or it is under the low setpoint value, the output relay is activated in order to generate an error signal, at the end of the delay time. If the AC current value is under the setting value, before the end of the delay time, the relay resets itself and no tripping occurs.

## Latch Function (L 위논( ):

In case of overcurrent or undercurrent the output relay is activated. Latch function is used to select the output relay operation mode. Either "OF" or "On" position may be selected. At position "OF": If the current is below the setting value, output relay releases

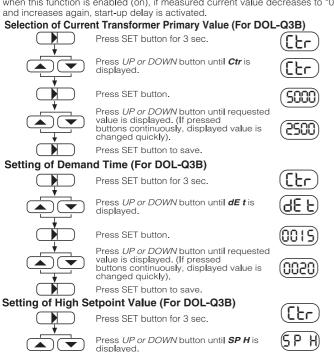
At position "On": Even if the current is below the setting value, output relay remains activated and releases only by pressing the "set" button.

# Instant Tripping ( ₺ ෦ ₽ ):

If the AC current is over the 1.5 times of setting value or it is under the 0.5 times of setting value, the output relay is activated without any delay time. This function is user-selectable.

Start Time Delay: (5t-t): When the current is start flowing, the setpoint values are ignored for the determined time. If auto start mode is activated, after the AC current is cutted, the device returns into the starting state.

Automatic Start Mode ( AULo ): If this function is disabled (off), start-up delay (Strt) is activated only when initial current is applied to the measurement input of device. However, when this function is enabled (on), if measured current value decreases to "0" (zero) value



Press SET button.

Press SET button to save.

Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).

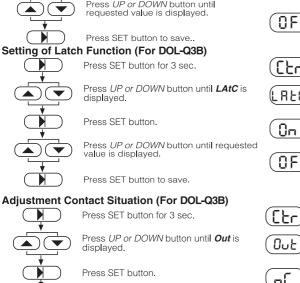
Setting of Low	Setpoint Value (For DOL-Q3B)  Press SET button for 3 sec.			
	Press <i>UP or DOWN</i> button until <i>SP L</i> is	( <u>[</u> tr)		
	displayed.	SP L		
	Press SET button.	2500		
	Press <i>UP or DOWN</i> button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).	(2250)		
	Press SET button to save.			
Setting of Hysto	eresis Value (For DOL-Q3B)			
	Press SET button for 3 sec.			
	Press <i>UP or DOWN</i> button until <i>HYS</i> is displayed.	(HYS)		
	Press SET button.	(5.000)		
	Press <i>UP or DOWN</i> button until requested value is displayed. (If pressed buttons continuously, displayed value is	(3.000)		
	changed quickly).  Press SET button to save.	6.000		
Setting of On Time Value (For DOL-Q3B)				
	Press SET button for 3 sec.			
	Press <i>UP or DOWN</i> button until <i>Ont</i> is displayed.	(On F)		
	Press SET button.	(0.010)		
	Press <i>UP or DOWN</i> button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).			
•		(0 15.0)		
	Press SET button to save.			
Setting of Off Tir	ne Value (For DOL-Q3B)			
Setting of Off Tir		<u>[</u>		
Setting of Off Tir	ne Value (For DOL-Q3B)	(Ctr) (OF t)		
Setting of Off Tir	ne Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.	(Ctr) (OF t) (010.0)		
Setting of Off Tir	ne Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.	(Ctr) (OF t) (010.0) (015.0)		
Setting of Off Tir	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is			
	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).			
	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.			
	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)			
	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until Strt is displayed.  Press SET button.	(015.0) (Ctr) (5trt)		
	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until Strt is displayed.			
	Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until Strt is displayed.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is buttons continuously, displayed value is	(015.0) (Ctr) (Strt) (010.0)		
Setting of Start T	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until Strt is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).	(015.0) (Ctr) (Strt) (010.0)		
Setting of Start T	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until Strt is displayed.  Press SET button.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.	(015.0) (Ctr) (Strt) (010.0)		
Setting of Start T	Press SET button.  Press SET button to save.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until Strt is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Start Mode (For DOL-Q3B)	(015.0) (Etr) (5trt) (010.0) (015.0)		
Setting of Start T	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until Strt is displayed.  Press SET button.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Start Mode (For DOL-Q3B)  Press SET button for 3 sec.	015.0 (Ctr) (Strt) 010.0 (O15.0) (Ctr) (Rut0)		
Setting of Start T	Press SET button for 3 sec.  Press UP or DOWN button until OF t is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Time Value (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until Strt is displayed.  Press SET button.  Press UP or DOWN button until requested value is displayed. (If pressed buttons continuously, displayed value is changed quickly).  Press SET button to save.  Start Mode (For DOL-Q3B)  Press SET button for 3 sec.  Press UP or DOWN button until AutO is displayed.	015.0 (Ctr) (Strt) (010.0) (D15.0)		

# **RAIL MOUNTED AMMETER** DOL-Q3B



#### Setting the Instant Tripping Function (For DOL-Q3B)





# Escaping the Set Menu (For DOL-Q3B)

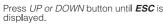


If you do not request to change any adjustment in the menu;

Press UP or DOWN button until requested

Press SET button to save.

value is displayed.



Press SFT button

п0

# Displayed Average Demand (For DOL-Q3B)



Press and hold the DOWNbutton to see

the Average demand.

# Displayed Peak Value (For DOL-Q3B)



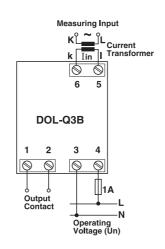
Press and hold the UP button to see

## Deleting the Demand and Peak Value (For DOL-Q3B)



Press UP and DOWN buttons at the same time

# **Connection Diagrams**



# Warning:

- a) A switch or circuit breaker must be connected between the network and the auxiliary supply input of device.
- b) Connected switch or circuit breaker must be in close proximity to the device.
- c) Connected switch or circuit breaker must be marked as the disconnecting device for the equipment.
- d) The type of the used fuse must be FF type and the current of the used fuse must be 1A.
- e) No need of a vantilator in the installation area

#### **Technical Data**

Operating Voltage (Un),\*

Operating Range (ΔU) : Please look at labels on the device.

Operating Frequency (f) : 45-65 Hz

: 1% ±1 digit [(%10-%100) full scale] Accuracy

Measuring Input (Iin) : 0.05-5.5 A (for DOL-Q3B)

Measuring Range : 0.05 -10000 A with Ct (for DOL-Q3B) Current Transformer Ratio (Ct) : 5...10000 / 5A (for DOL-Q3B)

Power Consumption(Pcons) : <4 VA Burden : <1 VA

Output Contact : 5A, 250V, 1250VA (Resistive) (for DOL-Q3B)

: >1.5 x SP H or <0.5 x SP L Ins. Tripping

(for DOL-Q3B)

Hysteresis : 0-0.5 x Full scale (for DOL-Q3B) Delay Times : 0.0 - 999.9 sec. (for DOL-Q3B) Demand Time (Average) :1-60 min. (for DOL-Q3B) **Equipment Protection** : Double Insulation ( ),

Measuring Category III

Ambient Temperature : -5 °C; +50 °C

Degree of Protection : IP 40 (Front Panel), IP 20 (Terminals)

Wire Cros section (for terminals): 2.5 mm<sup>2</sup> : Rail mounting Installations Dimensions : Type PK 20 Weight : 0.25 kg

# **Packaging Information**

: 16 Pcs Pcs per Package : 4 kg Package Weight

# **Factory Settings:**

Ctr = 0005	HYS = 0.100	AutO= OF
dEt = 0015	On $t = 010.0$	trP = OF
SP H= 4.000	OF $t = 010.0$	LAtC= OF
SP L = 0.250	Strt = 006.0	Out $= nO$

