1. DESCRIPTION

The BA577E is a general purpose, panel mounting instrument with a single input that can be configured as a Timer or as a Clock. As a Timer the BA577E is able to measure and display the elapsed time between external events, or control external events via two optional factory fitted control outputs. When configured as a Clock the BA577E displays local time and the optional control outputs can turn *on* and *off* twice in each twenty four hour period.

This abbreviated instruction sheet is intended to assist with installation, a comprehensive instruction manual describing system design and configuration may be downloaded from the BEKA website or may be requested from the BEKA sales office.

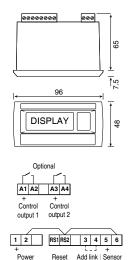
2. INSTALLATION

The BA577E has IP66 front of panel protection but it should be shielded from direct sunlight and severe weather conditions. The rear of the instrument has IP20 protection.

Cut-out dimensions

Recommended for all installations. Mandatory to achieve IP66 seal between instrument and panel.

90 +0.5/-0.0 x 43.5 +0.5/-0.0



Support panel wiring to prevent vibration damage

to energise input

sensor

input

supply

10 to 30V do

Fig 1 Cut-out dimensions and terminals

Abbreviated instructions for

BA577E One input general purpose Timer or Clock



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1. Align foot and body of panel mounting clamp by turning screw anticlockwise



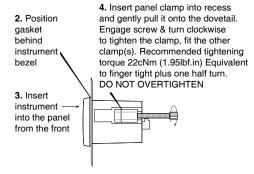


Fig 2 Installation procedure

EMC

For specified immunity all wiring should be in screened twisted pairs with screens earthed at one point.

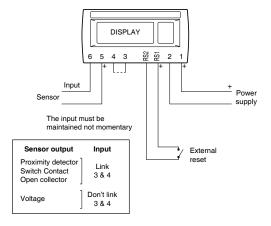
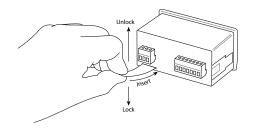


Fig 3 Use with Typical system

Scale card

The Timer or Clock's units of measurement are shown on a printed scale card visible through a window at the right hand side of the display. The scale card is mounted on a flexible strip that is inserted into a slot at the rear of the instrument as shown below



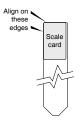
ig 4 Inserting flexible strip carrying scale card into slot at the rear of Timer or Clock.

Thus the scale card can easily be changed without removing the Timer or Clock from the panel or opening the instrument enclosure.

New Timer or Clocks are supplied with a printed scale card showing the requested units of measurement, if this information is not supplied when the Timer or Clock is ordered a blank card will be fitted

A pack of self-adhesive scale cards printed with common units of measurement is available as an accessory from BEKA associates. Custom printed scale cards can also be supplied.

To change a scale card, unclip the protruding end of the flexible strip by gently pushing it upwards and pulling it out of the enclosure. Peel the existing scale card from the flexible strip and replace it with a new printed card, which should be aligned as shown below. Do not fit a new scale card on top of an existing card.



Align the self-adhesive printed scale card onto the flexible strip and insert the strip into the Timer or Clock as shown

Fig 5 Fitting scale card to flexible strip

3. OPERATION

The Timer or Clock is controlled by four front panel push buttons. When configured as a Timer they have the following functions in the operating mode:

- P + E Access to configuration menu.
- ▼ When local control is enabled starts the Timer
- When local control is enabled stops the Timer.
- Shows the grand total (run time) in hours and tenths of an hour irrespective of Timer configuration. If buttons are held for longer than ten seconds the grand total may be reset to zero if the grand total reset sub-function

 LLr Leb is enabled in the LoC rSEL configuration function.

To reset the grand total to zero from the display mode press the e + a buttons for ten seconds until \complement tr. n_0 is displayed, using the e or a button change the display to \complement tr. \$ 5 and press e.

- ▼ + ▲ To reset the Timer to zero or to the set time 5EL L depending on whether the Timer is configured to time-up or time-down press the ▼ + ▲ buttons simultaneously for more than three seconds. This is a configurable function.
- P + A When enabled in the configuration menu, operating these two buttons simultaneously provides direct access to the set time 5EŁ Ł and allows adjustment when the timer is in the display mode.
- P + ▼ Shows in succession, firmware version number, instrument function ELRPSE or [Lo[and any output accessories that are fitted:
 - R Dual Control Outputs

See full instruction manual for description of use when configured as a Clock

The BA577E is CE marked to show compliance with the EMC Directive 2014/30/EU.

4. CONFIGURATION Timer or Clocks are supplied configured as requested at time of ordering, if not specified default Timer configuration will be supplied but can easily be changed on-site. Security Code Display DISPLAY Fig 6 shows the location of each function within the Timer configuration menu with a brief summary of the function. Please refer to the full instruction manual for detailed configuration information, description of Enter code by optional outputs and Clock configuration menu. pressing ▲ or ▼ & ₽ Access to the configuration menu is obtained by pressing the P and E buttons simultaneously. If the Timer or Clock's security code is set to default 0000 the first parameter FuncEx on will be displayed. If the to move to next CodE digit. Code IIIIII instrument is protected by a security code. Lode will be displayed. The four digit code must be entered to gain access to the menu. allows direct access to Only included when optional the menu Control Outputs are fitted 0000 Ē Ē. đ. Ē FunEtion 4.50-2 SERNESEOP טחי 25 SEŁ Ł CACTER BC SEE I P-F8.1 LOE rSEE oP ! oP2 [odE] rSEE dEF inPut luP oc do CLr Ghob Ė PE ELRPSE 568 00:00:00 ELr. no 0000 0000 INPLE SPE dEbount B LoEAL 15:00:00 EnbL REE4 d٥ , dLE rSEEEnbL ELr Etot As of ė Ė ė ė oFF 0000 0000 0000 oP.CoL dEFRuLE oFF oFF Function <u>Debounce</u> Lower Display Start & stop Units of Enable Security code Direction of Power fail Local total Clear grand tota Define Reset Input Set time Local grand timer display access to for direct count reset total clear Security Code configuration to EYELES not ▲ or ▼ ▲ or ▼ Set Time from Timer factory or 📤 or 💌 or or access to or press ▲ or ▼ Entering by enabled display mode Set Time to select how ▲ or ▼ or or defaults to select to select to select to select how to select to adjust pressing timer is value and to select timer functions to turn the to turn the to select YES hours minutes seconds Enter code by ▲ or ▼ ■ or ▼ local total or 📤 and Function of Input type level of controlled uP or do when power is local grand total to reset grand instruction by pressing to select display to select restored after reset function reset function total to zero. instrument debounce P to move to P.E.o.L to move entering Sur E or ▼ on or oFF on or oFF on Or oFF failure next digit to control Press ELRPSE 12:00:00 dEFRult SEd oERL Confirm next digit and P Collector or 🛋 Interval L. GHE Set time 5EL L Start , dLE When on is When on is instruction by to move to ▼ button 30:00 to adjust each oLES L Stopped, entering 5ur É ~EE next digit requires reset pressing pressing Press digit and P Voltage ower display <1V >3V & start input Code 0000 📤 and 💌 🗷 and 🛋 or 🛋 to move to Time display disabled allows direct simultaneously to adjust each next diait o! F5 H simultaneously or more than for more than 1 digit and P Confirm selection access Voltage Paused, CHELES seconds in the seconds in the by entering 5ur E <3V >10V to move to enabled Input high (open requires start display mode display mode by pressing next digit input ▲▼ & P Input low (close 0 < >40m or ▼ grand total total display to move to ContinuE to select display next digit Control 2 Resumes Start timing 568 Input low (close Cycle No. & Ē Ē ontREt total cycle Switch with status SE DELA EnbL EAET EUF contact shown at start of each operation LAPET Ē Cycle No. & oFF 00) 00000000 total cycle with status EnbL + Pion ♣ Enable Cycle count Restart delay OP! OFF oP1 dELR shown cycle function and 💌 and 💌 neriodically and to adjust ė ė to adjust to toggle flashing digit flashing digit lower display between and P and 🕑 oFF SEREE StoP 00000 disabled on and oFF to move to move to next digit to next digit. **Enable** Output on at Output off at Output on delay Sets numbe Sets delay output 1 of cycles etween cycles 📤 and 💌 ▲ and ▼ and and 💌 n the same units between to select to select to toggle to adjust 1 and 99 as SEt t eauired function nuired function flashing digit to be on and off rESEE rESEŁ and 🕑 performed. to move PRUSE to next digit 00 for **BELRY** Set delay in donE cycling econds before nrESEE nrESEŁ output 1 s energised o PRuSE o PRUSE Timer repeat cycle function n dELRY n dELRY Manuals, certificates and datan donE sheets can be downloaded from Select action Select action hat energises nat de-energise http://www.beka.co.uk/ba577e output 1 output 1

Fig 6 Timer Configuration menu

Output 1 configuration