

tico 734



MODEL OVERVIEW

Totalizer (0 734 000)
8 digit, reset key can be enabled/disabled via enable input

Add/Subtract Totalizer (0 734 001)
8 digit differential counter, A-B, prescaler 0.0001 to 99.9999, decimal point, count offset range from -999,999 to 999,999, reset key can be enabled/disabled.

Flexible Counter Series in DIN size 36 x 72 mm

- LCD display, 8 digits, 12 mm height, excellent contrast through
- Backlighting with a 10-28 VDC supply
- Lithium battery power supply
- Decimal point, input scaling, count direction, output mode, etc. programmable, depending on model
- Programming reduced to a minimum for easy handling and set-up
- Suitable for TTL
- Mounting depth 29 mm

The family **tico 734** consists of ten models:

- 0 734 000 Totalizer without scaling
- 0 734 001 Add/Subtract totalizer
- 0 734 002 Position indicator
- 0 734 003 Tachometer
- 0 734 004 Programmable rate meter
- 0 734 005 Rate meter with totalizer
- 0 734 006 Time counter
- 0 734 007 Preset counter
- 0 734 008 Time preset counter
- 0 734 009 Rate meter 005; with total and pulsed output

Reset — 4	5 — Res.En.	4 Remote reset, NPN
30 Hz — 3	6 NC	3 Input A, 30 Hz, NPN
10 kHz — 2	7 NC	2 Input A, 10 kHz, PNP
0V — 1	8 — 10-28 VDC	1 0V, Common
		5 Front panel reset enable
		6 Not used
		7 Not used
		8 DC-supply for backlighting

Suitable option modules: 1 734 0.. 10, 12, 14, 17, 19

Reset — 4	5 — Progr.	4 Remote reset, NPN
A:30 Hz — 3	6 — B:30 Hz	3 Input A, 30 Hz, NPN incrementing
A:10 kHz — 2	7 — B:10 kHz	2 Input A, 10 kHz, PNP incrementing
0V — 1	8 — 10-28 VDC	1 0V, Common
		5 Program enable
		6 Input B, 30 Hz, NPN, decrementing
		7 Input B, 10 kHz, PNP, decrementing
		8 DC-supply for backlighting

Suitable option modules: 1 734 0.. 10, 12, 14, 17, 19

Power Supply

Display

Count Inputs

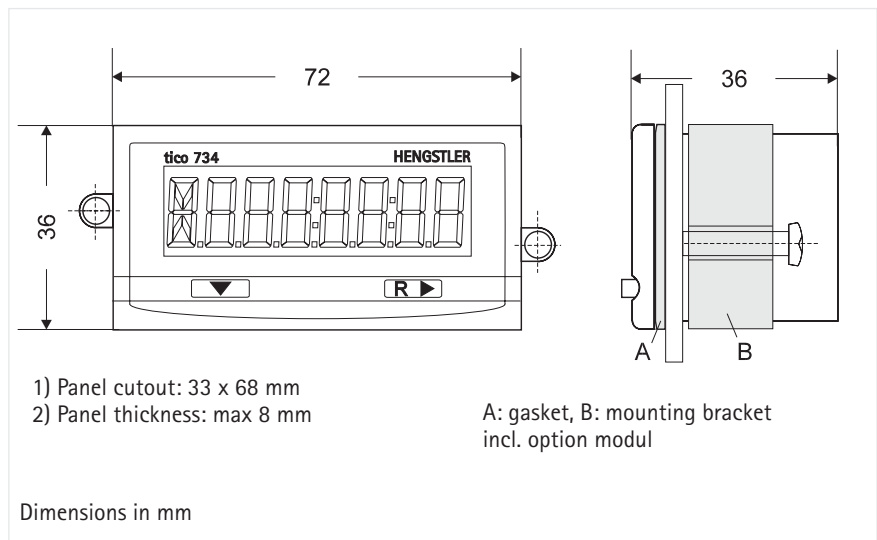
Control Inputs

Physical

Environmental

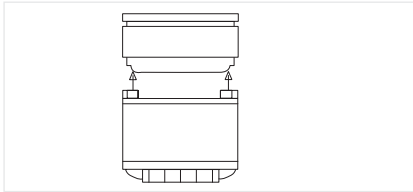
DIMENSIONS

Internal	Single or dual lithium 3 V battery (CR 1/2 AA), typical life time of 5 years (10 yrs w/2 batteries). „Lo BAT“ display flashes approximately 2 weeks prior to end of battery life.
via Option Module	120/240 VAC provides 12 VDC for display backlighting and reduces battery load in models with SSR output
Display	LCD, 12 mm height, 8 digits for counters
Backlighting	Whole display area can be backlit with a 10–28 VDC supply, green–yellow colour
High Speed Input (2)	PNP, ≤ 28 VDC, max. 10 kHz (50 % duty cycle), Low < 1.0 V, High > 2.0 V, impulse > 45 µs, impedance 1 MΩ
Low Speed Input (3)	NPN, ≤ 28 VDC, max. 30 Hz (50 % duty cycle), Low < 1.0 V, High > 2.0 V, impedance 1 MΩ
High Voltage Option Module	100..260 VAC/DC, 30 Hz, 1 MΩ, with internal connection to input (3)
Low Voltage Option Module	5..30 VAC/DC, 30 Hz, 17 kOhm, with internal connection to input (3)
Enable Input (5)	NPN, 28 VDC, level sensitive
Reset Input (4)	NPN, 28 VDC, edge triggered, max. 30 Hz (50 % duty cycle)
Mounting	Front panel mounting with mounting bracket
Dimensions	DIN 36 x 72 mm, 36 mm total depth, total width 83 mm
Panel Cutout	33 ^{+0.3} mm x 68 ^{+0.3} mm, depth behind panel < 29 mm
Panel Thickness	max. 8 mm
Front Panel Rating	IP 65.
Operating and Storage Temperature	0 °C to + 55 °C - 20 °C to + 60 °C



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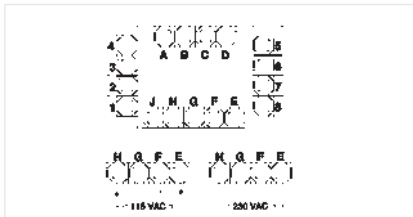
OPTION MODULES



FUNCTIONS OVERVIEW

TECHNICAL DATA

WIRING



ORDERING INFORMATION

Technical data

With the Option Modules, the **tico 734** can be functionally extended and adapted to special application conditions. The following option functions are available:

- AC power supply providing sensor supply 10-20 VDC / 50 mA and 12 V supply for display backlighting (supports the battery in models with SSR output)
- Relay output, changeover contact, 5 A, 120/240 VAC or 30 VDC
- High voltage input (100..260 VAC/DC, max. 30 Hz, 200 KΩ)

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		010	011	012	013	014	015	016	017	018	019	020
High Voltage Input	C-D	x		x	x		x					
Relay 1 x change over	A-B-J		x		x		x	x		x		x
AC power Supply	E-F, G-H			x		x	x	x			x	x
Low Voltage Input	C-D								x	x	x	x

Power Supply (E-H)	115 VAC or 230 VAC (see wiring), frequency 50/60 Hz. Terminal (8) provides an unregulated 10-20 VDC supply for powering sensors up to 50 mA
Relay Output (A-B-J)	Type: SPDT (Form C) mechanical relay; Operate Time: 6 ms 5A, 120/240 VAC or 30 VDC, silver alloy Electrical Life: > 500 000 operations, Mechanical Life: > 10 million operations
High Voltage Input (C-D)	Voltage Range: 100 to 260 VAC or VDC Count Speed: max. 30 Hz. (duty cycle 50 %) Minimum Pulse Width: 12 ms; Impedance: 200 kOhm
Low Voltage Input (C-D)	Voltage Range: 5 to 30 VAC or VDC Count Speed: max. 30 Hz. (duty cycle 50 %) Minimum Pulse Width: 12 ms; Impedance: 127 kOhm
Mounting	Attaching on back of instrument
Dimensions	42 x 69 mm, depth 58 mm, total depth behind panel with instrument 82 mm
Temperature	Operating: -0° C to +50° C; Storage -40° C to +90° C;
General	DIN EN 61010 part 1, Protection according to class II Contamination level 2; Overvoltage category II

All modules contain 17 terminals. The exact functions that are present are determined by the model of instrument and option module (see Functions Overview).

1-8 Connection to instrument (refer to appropriate operating instructions)

A	Normally Open Relay Contact
B	Relay Common
J	Normally Closed Relay Contact
C-D	High or Low Voltage Input, no polarity, (provides NPN signal on terminal 3)
E-F	115 VAC Line winding I
G-H	115 VAC Line winding II

Panel Instruments		Option Modules	
Totaliser	0 734 000	HV Input	1 734 010
Add/Subtract Totalizer	0 734 001	Relay	1 734 011
Position Indicator	0 734 002	AC Power	1 734 012
Tachometer	0 734 003	HV Input and Relay	1 734 013
Programmable Rate Meter	0 734 004	HV Input and Power	1 734 014
Rate Meter with Totalizer	0 734 005	Power and Relay	1 734 015
Elapsed Time Indicator	0 734 006	HV Input/Power/Relay	1 734 016
Preset Counter	0 734 007	LV Input	1 734 017
Preset Timer	0 734 008	LV Input and Relay	1 734 018
Rate Meter with Total and Pulsed Output	0 734 009	LV Input and Power	1 734 019
Lithiumbattery	E3533 355	LV Input/Power/Relay	1 734 020