

tico 734



MODEL OVERVIEW

Position Indicator (0 734 002)
 8 digit, prescaler 0.0001 to 99.9999,
 decimal point, reset value range

Flexible Counter Series in DIN size 36 x 72 mm

- LCD, 8 digits, 12 mm height, excellent contrast through supertwist technology
- Backlighting with a 10-28 VDC supply
- Lithium battery power supply
- Decimal point, input scaling, count direction, output mode, etc. programmable, depending on model
- Magnetic pick-up input enables a rate measurement system not requiring external power
- Programming reduced to a minimum for easy handling and set-up
- CE approval, IP 65, NEMA 4

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

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

Power Supply

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.

Display

via Option Module 120/240 VAC provides 12 VDC for display backlighting

Display LCD, 12 mm height, 8 digits

Backlighting Whole display area can be backlit with a 10–28 VDC supply, green-yellow colour

Count Inputs

High Speed Input (2) PNP, ≤ 28 VDC, max. 10 kHz (50 % duty cycle), Low < 1.0 V, High > 2.0 V, impulse $> 45 \mu\text{s}$, impedance $1 \text{ M}\Omega$

Low Speed Input (3) NPN, ≤ 28 VDC, max. 30 Hz (50 % duty cycle), Low < 1.0 V, High > 2.0 V, impedance $1 \text{ M}\Omega$

High Voltage Option Module 100..260 VAC/DC, 30 Hz, $1 \text{ M}\Omega$, with internal connection to input (3)

Low Voltage Option Module 5..30 VAC/DC, 30 Hz, $17 \text{ k}\Omega$, with internal connection to input (3)

Control Inputs

Enable Input (5) NPN, 28 VDC, level sensitive

Reset Input (4) NPN, 28 VDC, edge triggered, max. 30 Hz (50 % duty cycle)

Physical

Mounting Front panel mounting with mounting bracket

Dimensions DIN 36 x 72 mm, 36 mm total depth, total width 83 mm

Panel Cutout $33+0,3 \text{ mm} \times 68+0,3 \text{ mm}$, depth behind panel $< 29 \text{ mm}$

Panel Thickness max. 8 mm

Environmental

Front Panel Rating IP 65 / NEMA 4

Operating and Storage Temperature $0 \text{ }^\circ\text{C}$ to $+ 55 \text{ }^\circ\text{C}$

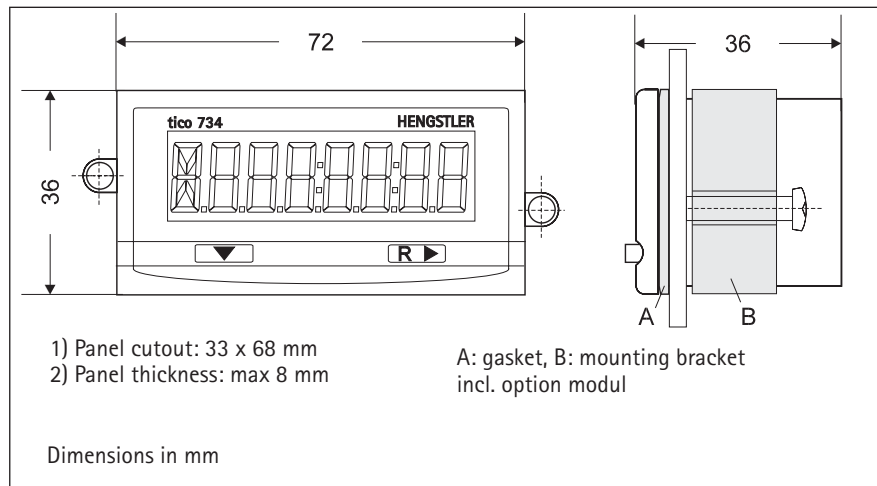
$- 20 \text{ }^\circ\text{C}$ to $+ 60 \text{ }^\circ\text{C}$

General DIN EN 61010 part 1 / VDE 0411 part 1

Protection according to class II, Contamination level 2

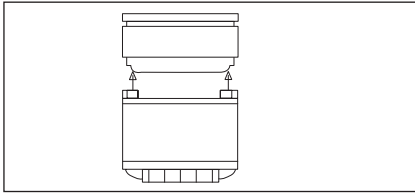
Overvoltage category II

DIMENSIONS



tico 734

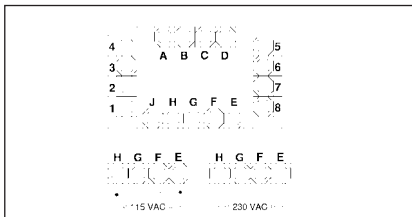
OPTION MODULES



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)

1734...

	Connections	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	
Totalizer	0 734 000
Add/Subtract Totalizer	0 734 001
Position Indicator	0 734 002
Tachometer	0 734 003
Programmable Rate Meter	0 734 004
Rate Meter with Totalizer	0 734 005
Elapsed Time Indicator	0 734 006
Preset Counter	0 734 007
Preset Timer	0 734 008
Rate Meter with Total and Pulsed Output	0 734 009
Lithiumbattery	E3533 355

Option Modules	
HV Input	1 734 010
Relay	1 734 011
AC Power	1 734 012
HV Input and Relay	1 734 013
HV Input and Power	1 734 014
Power and Relay	1 734 015
HV Input/Power/Relay	1 734 016
LV Input	1 734 017
LV Input and Relay	1 734 018
LV Input and Power	1 734 019
LV Input/Power/Relay	1 734 020