

Totalizers electromechanic

Impulse counters adding, modular system

Display 6- or 8-digits, with/without reset button

F 304, F 314, F 324, F 364



F 304 - Socket box



F 314 - Front panel with screw mount



F 324 - Front panel with spring clip

Features

- Impulse counter
- Adding
- Display 6- or 8-digits
- With or without reset button
- Socket box

Technical data - electrical ratings

Voltage supply	24/110 VAC ±10 % (50/60 Hz) 230 VAC +6/-10 % (50/60 Hz) 24 VDC ±10 %
Ripple residue	<48 %
Nominal frequency	50 / 60 Hz
Power consumption	2.2 W, 2.4 VA
Pulse ratio	1:1
Service life	100 million impulses
Standard DIN EN 61010-1	Protection class II Overvoltage category II Pollution degree 2
Emitted interference	DIN EN 61000-6-4
Interference immunity	DIN EN 61000-6-2
Approval	CE conform

Technical data - mechanical design

Display	White numbers on black
Digit height	4.5 mm
Count mode	1 impulse = 1 count
Step-by-step switching	Adding in 2 half steps
Reset	Manual by reset button
Operating temperature	0...+60 °C
Storing temperature	-20...+70 °C
Relative humidity	80 % non-condensing
Protection DIN EN 60529	IP 41
E-connection	Soldering pins (flat)
Weight approx.	100 g
Material	Housing: Noryl PPO, black

Totalizers electromechanic

Impulse counters adding, modular system

Display 6- or 8-digits, with/without reset button

F 304, F 314, F 324, F 364

Technical data - mechanical design

F 304

Number of digits	6-digits with reset button 8-digits without reset button
Measuring range	999 999 and 99 999 999
Housing type	Socket box
Mounting	Socket box
Dimensions W x H x L	50 x 25 x 85.8 mm
Cutout dimensions	50 x 25 mm
Installation depth	85.9 mm

F 314

Number of digits	6-digits with reset button 8-digits without reset button
Measuring range	999 999 and 99 999 999
Housing type	Built-in housing
Mounting	Front panel with 2 screws
Dimensions W x H x L	60 x 50 x 61 mm
Cutout dimensions	51 x 26 mm
Installation depth	77.5 mm

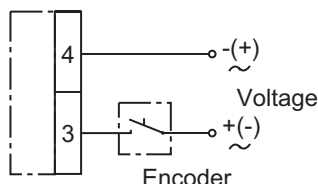
F 324

Number of digits	6-digits with reset button 8-digits without reset button
Measuring range	999 999 and 99 999 999
Housing type	Built-in housing
Mounting	Front panel with spring clips
Dimensions W x H x L	53.2 x 28.2 x 61 mm
Cutout dimensions	51 x 26 mm
Installation depth	77.5 mm

F 364

Number of digits	6-digits with reset button
Measuring range	999 999
Housing type	Built-in housing
Mounting	Front panel with 4 screws
Dimensions W x H x L	66.5 x 37 x 75 mm
Cutout dimensions	51 x 26 mm
Installation depth	72 mm

Connection diagram



Trigger level

Max. counting speed 10 pulses/s

Voltage	24/110 VAC ±10 % 230 VAC +6/-10 %
---------	--------------------------------------

Power	2.4 VA
-------	--------

Min. pulse duration	50 ms
---------------------	-------

Min. pulse interval	50 ms
---------------------	-------

Switch on time (at 25 °C)	100 %
---------------------------	-------

Max. counting speed 20 pulses/s

Voltage	24 VDC ±10 %
---------	--------------

Power	2.2 W
-------	-------

Min. pulse duration	25 ms
---------------------	-------

Min. pulse interval	25 ms
---------------------	-------

Switch on time (at 25 °C)	100 %
---------------------------	-------

Accessories

Front panels for F 324 (page %S)

Z 100.01A	Front panel with transparent protective cover, for socket box 50 x 25 mm
-----------	--

Front frames for F 314 (page %S)

Z 105.02A	Front frame with cylinder lock provided on transparent cover
Z 107.01A	Front frame, insertion cutout 50 x 25 mm

Totalizers electromechanic

Impulse counters adding, modular system

Display 6- or 8-digits, with/without reset button

F 304, F 314, F 324, F 364

Part number

Socket box

F 304.

		<u>Display</u>
	C	8-digits 99 999 999
	B	6-digits 999 999
		<u>Voltage</u>
	A3	24 VDC
	A5	24 VAC
	A8	110 VAC
	A9	230 VAC
		<u>Reset</u>
800B		Without reset button
650A		With reset button

Front panel with screw mount

F 314.

		<u>Display</u>
	C	8-digits 99 999 999
	B	6-digits 999 999
		<u>Voltage</u>
	A3	24 VDC
	A5	24 VAC
	A8	110 VAC
	A9	230 VAC
		<u>Reset</u>
800B		Without reset button
650A		With reset button

Front panel with spring clips mount

F 324.

		<u>Display</u>
	C	8-digits 99 999 999
	B	6-digits 999 999
		<u>Voltage</u>
	A3	24 VDC
	A5	24 VAC
	A8	110 VAC
	A9	230 VAC
		<u>Reset</u>
800B		Without reset button
650A		With reset button

Front panel with screw mount

F 364. **650A** **B**

		<u>Display</u>
	B	6-digits 999 999
		<u>Voltage</u>
	A3	24 VDC
	A5	24 VAC
	A8	110 VAC
	A9	230 VAC
		<u>Reset</u>
650A		With reset button

Totalizers electromechanic

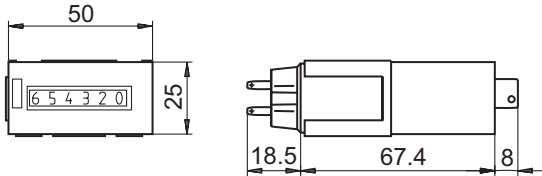
Impulse counters adding, modular system

Display 6- or 8-digits, with/without reset button

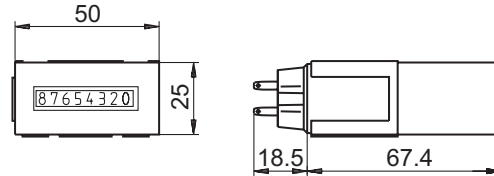
F 304, F 314, F 324, F 364

Dimensions

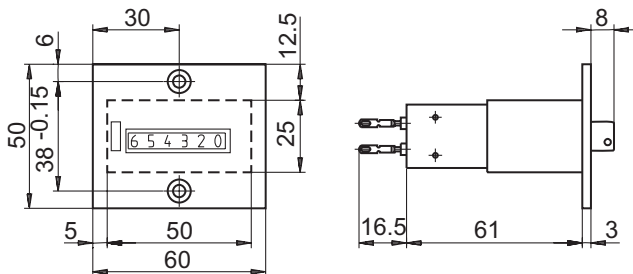
F 304 with reset button, 6-digits



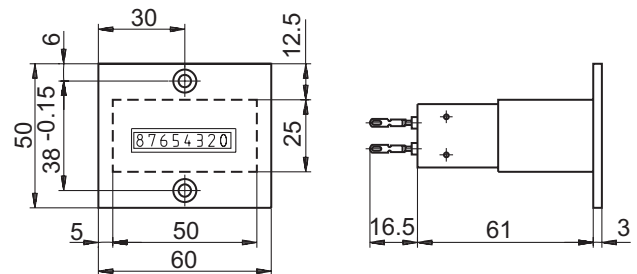
F 304 without reset button, 8-digits



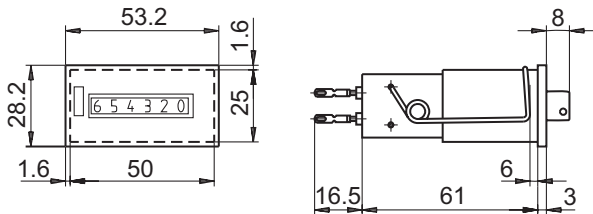
F 314 with reset button, 6-digits



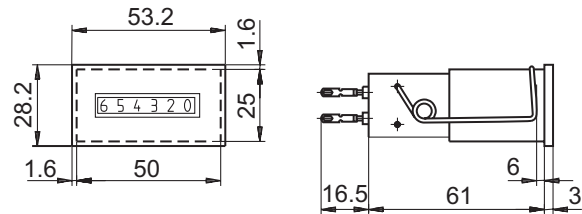
F 314 without reset button, 8-digits



F 324 with reset button, 6-digits



F 324 without reset button, 8-digits



F 364 with reset button, 6-digits

