

HOUR METERS

AC HOUR METERS  UL FILE: E86119  CSA FILE: LR44080 

UWZ SERIES

UWZ 48
Surface Mount



UWZ 48A
Enclosed Surface Mount



UWZ 48E
Flush Mount



UWZ 48V
DIN Rail Mount



Bezel:
1.89"x1.89" (48x48mm)
Mounting: Surface
Digits: 7
Capacity: 99,999.99h
Voltage: 24, 120, 220
Frequency: 50, 60hz
Termination: Screw Lugs
Weight: 3.5oz.

Surface mounted type. The UWZ 48 unit with plug-in base where terminal protection is not necessary or already exists. The socket base is easy to install and connect. The meter is simply plugged into the base and secured by one screw.

Bezel:
1.89"x1.89" (48x48mm)
Mounting: Surface
Digits: 7
Capacity: 99,999.99h
Voltage: 24, 120, 220
Frequency: 50, 60hz
Termination: Screw Lugs
Weight: 3.5oz.

Wall mounted type. Used in conjunction with a terminal cover for added safety, the UWZ 48A is surface mounted. Installation merely requires fixing the base to wall or panel with two screws, wiring the base, and plugging in the meter with the terminal cover.

Bezel:
1.89"x1.89" (48x48mm)
Mounting: Flush
Digits: 7
Capacity: 99,999.99h
Voltage: 24, 120, 220
Frequency: 50, 60hz
Termination: Combination 1/4" spade and screw clamp
Weight: 2.8oz.

Flush mounted with bracket. The UWZ 48E unit fits into a 1.79x1.79in. (45.5x45.5mm) cut-out. The thickness of the panel for flush mounting can be up to 0.35in. (9mm). The unit is secured in position by a plastic mounting bracket. Also fits square or round openings for 72mm meters with optional 72mm bezel.




Bezel:
1.89"x1.89" (48x48mm)
Mounting: DIN Rail
Digits: 7
Capacity: 99,999.99h
Voltage: 24, 120, 220
Frequency: 50, 60hz
Termination: Screw Lugs
Weight: 3.5oz.

DIN rail mounting. A special snap-on socket base enables the unit to be quickly and simply fitted on DIN rail.

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FWZ SERIES

Minimeter panel mount with watertight/dusttight sealed bezels and 99,999.99h capacity.

<p style="text-align: center;">FWZ 36</p> 	<p style="text-align: center;">FWZ 53</p> 	<p style="text-align: center;">FWZ 55</p> 
<ul style="list-style-type: none"> • Flush mount • Spring clip clamp • Magnifying lens • Easy to read bezel 	<ul style="list-style-type: none"> • 2 bolt rectangular flange mount on 1.75" centers 	<ul style="list-style-type: none"> • Larger bezel • Flush mount with plastic slide-on ratchet clamp

AC HOUR METERS

FWZ 72 DELUXE

<p style="text-align: center;">FWZ 72 Black Polycarbonate</p> 	<p style="text-align: center;">Sealed bezel watertight/dusttight</p> <p style="text-align: center;">3 bolt flange mount</p> <p style="text-align: center;">Shatterproof lens and bezel</p> <p style="text-align: center;">Time recording accuracy</p> <p style="text-align: center;">Display to 1/100 hour</p>	<p style="text-align: center;">FWZ 72B Blue-Silver on Colorless Frosted Polycarbonate</p> 
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All FWZ models have white numerals on black background with tenths and hundredths in yellow. All have combination 1/4" spade with removable screw clamp terminals.

DC HOUR METERS

GZ SERIES

<p style="text-align: center;">GZ 41</p> 	<p style="text-align: center;">GZ 40A</p> 	<p style="text-align: center;">GZ 40B</p> 	<p style="text-align: center;">GZ 52</p> 
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<ul style="list-style-type: none"> • Bezel: 2.12" x 1.25" (54 x 32mm) • Capacity: 99,999.9 hours • Digits: 6 - 0.125 high numerals <u>Hours</u>: white on black <u>Tenths</u>: red on white • Voltage: 10-80VDC • Power Consumption: .03W @ 12VDC .70W @ 48VDC • Temperature: -22° to 150°F (-30° to 65°C) • Special Model Temp: -40° to 185°F (-40° to 85°C) • Vibration Resistance: 10 to 75Hz @ 1-8g's • Termination: 1/4" spade terminals • Protected From: reverse polarity, inductive switch • Weight: 2oz 	<ul style="list-style-type: none"> • SAE Bezel: 2.31" dia. (59mm) • Capacity: 99,999.9 hours • Digits: 6 - 0.125 high numerals <u>Hours</u>: white on black <u>Tenths</u>: red on white • Voltage: 4-40VDC and 10-80VDC • Power Consumption: .03W @ 12VDC .70W @ 48VDC • Temperature: -22° to 150°F (-30° to 65°C) • Special Model Temp: -40° to 185°F (-40° to 85°C) • Vibration Resistance: 10 to 75Hz @ 1-8g's • Termination: 1/4" spade terminals • Protected From: reverse polarity, inductive switch • Weight: 2oz 	<ul style="list-style-type: none"> • 3-Hole Bezel: 2.80" dia. (72mm) • Totally sealed case • Capacity: 99,999.9 hours • Digits: 6 - 0.125 high numerals <u>Hours</u>: white on black <u>Tenths</u>: red on white • Voltage: 4-40VDC and 10-80VDC • Power Consumption: .03W @ 12VDC .70W @ 48VDC • Temperature: -22° to 150°F (-30° to 65°C) • Special Model Temp: -40° to 185°F (-40° to 85°C) • Vibration Resistance: 10 to 75Hz @ 1-8g's • Termination: 1/4" spade terminals • Protected From: reverse polarity, inductive switch • Weight: 2oz 	<ul style="list-style-type: none"> • Bezel: 2.28" round (58mm) • Capacity: 99,999.9 hours • Digits: 6 - 0.125 high numerals <u>Hours</u>: white on black <u>Tenths</u>: yellow on black • Voltage: 10-240VDC • Temperature: -40° to 160°F (-40° to 72°C) • Termination: Combination 1/4" spade and screw terminals • Weight: 3oz
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VIBRATION HOUR METERS

RZ SERIES

The Hour Meter Without Electrical Connection

RZ52 H OR V



The RZ hour meter records the running time of machines, vehicles, etc. which vibrate during operation.

The automatic mechanism in this meter converts vibrations into energy which drives the hour meter and minute sweep hand. It is so sensitive, it is capable of operating from the slight vibration of a moving car.

Intelligent Time Control Starts Here!

INNOVATION in applying new technology in small packages. Innovation in simplifying the setting and programming of time controls. Innovation in flexibility of mounting and use. Innovation is the key to providing superior electromechanical and electronic time controls and defrost timers to meet the application needs of contractors, as well as industrial, commercial, institutional, residential, and agricultural users.

ENERGY SAVINGS is one of the major benefits Grasslin Time Controls offer. From extremely compact electromechanical 24-hour and 7-day time switches and defrost controls to innovative 365-day multi-channel programmable controls, Grasslin products meet the need for control of heating, cooling, and refrigeration systems; interior, outdoor or display lighting; machinery and appliances, and many other applications.

MODERN DESIGN is exemplified by the compact size of Grasslin Time Switches. Look at the clean simple lines. Look at the easy-to-read dials. Look at the functional appearance. Look at the simplified programming. Over the last ten years, Grasslin has set the standard in design, quality and performance.

USER FRIENDLY is not just a buzzword at Grasslin. From the flexibility of mounting and ease of wiring to the minimal single function programming keys on electronic units, at Grasslin the installing contractor is our #1 concern.

The Advantages

BROAD PRODUCT RANGE: The right product for the job is available through the extensive selection of time control, hour meter, photo-electric control, defrost controls, defrost timers, and temperature control products offered.

SIMPLICITY: Programming either the electromechanical or electronic time controls are intuitive and easy to understand. No double function keys and consistent programming logic between models simplify programming. Most people can set them without consulting the

instructions.

INSTALLATION FLEXIBILITY: Compact design permits installation virtually anywhere; conserves control panel space. Capability for flush panel, surface, or DIN rail mounting, plus availability of both indoor and outdoor enclosures for all models makes installation a breeze.

PROGRAM CAPACITY: With closely spaced trippers, electromechanical controls provide up to 96 on/off events. With the unique block weekday/weekend and individual day programming, the electronic controls provide more than enough capacity for any application.

SWITCHING POWER: High switch ratings insure reliability and minimize cost by eliminating need for additional relays.

AUTHENTIC CLOCK FACE: A clock face, with hour and minute hands on electromechanical units eases setting of time and provides an attractive and functional appearance.

CARRYOVER: All electronic controls, and quartz drive electromechanical units come equipped with an automatically recharged battery for continued operation during power outages. Prevents loss of programs, or the need to reset the time of day.

MANUAL OVERRIDES: Available on all Grasslin time controls. Temporary or continuous overrides provide the user with complete control, and with maximum convenience.

UL, CSA AND CE MARKINGS: All Grasslin Controls products are UL Listed or UL Recognized, and are CSA Certified.