# **Limit switches**

Our limit switches offer a broad range for even the most demanding applications, e.g. conveyor systems.



# **AZH**

### Main characteristics: Compact and highly reli Miniaturised design

- able with excellent environ
   Metal body or plastic body ment-proof capabilities Gold-clad contacts for low
   IP67 / IP64
- level types



### Main characteristics:

- Compact design
- High load capability
- Economic



# **AZC1 (Magnelimit)**

### Main characteristics:

- Available with normally open or normally closed contact
  - Holding force up to 5kg
- Available in three colors

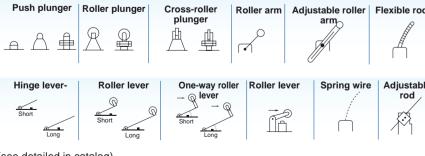


# **AZD**

### Main characteristics:

- Can be forced open, even
   Dimensions conform to if the contact is welded
- According to IP67

# **Actuators**



Low weight

Dust proof and oil resistant

IP64

(see detailed in catalog)

- Main characteristics:
- The terminal area can be fully opened for easy wiring
- Compact design High load reliability
- Easy wiring
- IP60 / IP64 Oil tight

**DIN EN 50047** 

Wide operating

temperature range

AZ8

Actuator heads are turnable in 90° steps



# **Temperature controllers**

Get every temperature exactly to the point – with our wide temperature controller range. Six different models, universal access (thermocouples, RTD, DC voltage, DC current), various output types (relays, non-contact voltage and current) and user-friendly handling characterise the KT series.





KT9

### KT4 KT7

### Main characteristics:

KT2

- Multi-input: versatile thermocouple, RTD, DC current, DC voltage
- Control modes: PID, on/off control, Anti-Reset-Windup (ARW)

### Heater-burn-out alarm available Alarm output with 9 different operation modes

KT8

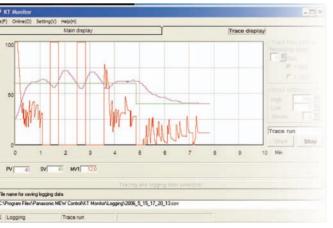
- RS485 ASCII/Modbus communication available
- Supply voltage: 24VAC/DC or 100 to 240VAC

Small size

# KT4H/KT4B

### Main characteristics:

- 11-segment display with 3 colors for PV
- 4 set values (externally selectable)
- Tool port as standard
- MEWTOCOL communi-



Ordering information KT Monitor Set (CD with software, manuals, tool port cable AKT4H820)

For detailed information, please refer to the main catalogs or www.panasonic-electric-works.com

# 

# **Eco POWER METERS**

# Panasonic



Electric power data collection and remote watching of plants and buildings

Electric power watching using Web Datalogger Unit with Eco POWER METER

Electric power watching using PLC with Eco POWER METER

Electric power watching in manufacturing

# KW1M

- Screw and DIN-rail installation possible
- Integrated RS485 interface (Modbus RTU/MEWTOCOL)
- Automatic logging of measurement data at numerous selectable intervals (can be saved on SD card)
- Diverse alarm functions, e.g. when current consumption levels are exceeded

High voltage input type for direct measurement of 400V loads

NEW: Direct input for secondary side of 1A/5A CT (AKW8115)

Up to 99 Eco-POWER METERs can be connected to one master PLC

Network compatibility: Modbus, RS485, MEWTOCOL (Panasonic

Three-phase, four-wire system compatibility

Calendar function

High voltage input

KW8M

Main characteristics:

Data log function (AKW8111H)

proprietary network protocol)

Dedicated CTs are no longer required

Integrated counter & hour meter function

- Suited for measuring 3-phase currents of up to 400VAC
- Monitors and displays the most important electrical parameters Display of calculated CO<sub>a</sub> use

cccc

Integrated pulse counter and hour meter

measurement values

DIN type

Main characteristics:

Control energy consumption,

Modbus/MEWTOCOL protocol

saving and environmental protection

Modbus (RTU) / MEWTOCOL protocol

Large display for increased visibility

For maintenance and control in applications involving energy

• 1 model supports 4 compact CTs supports 400VAC power

measurement (when using external voltage transformer Meter)

Supports 400VAC power

DIN type, 22.5mm

current voltage

measurement

Multiple inputs

Main characteristics:

Expanded basic functions

• RS485

Easy mounting

KW7M

- Pulse output
- Free software that allows you to display the most important
  - Reverse polarity, overvoltage protection • Frame: plastic
    - Long lifetime
    - Quiet operation
    - Optionally available with lock sensor output (alarm in case fan is blocked)

92 x 92 x 25mm

Rated operating voltages: 5V DC, 12V DC, 24V DC, (48VDC – ASFN1\*B\*\* series only)

Different rotation speeds per model

• Fan blockage protection

### **Dimensions:** 40 x 40 x 10mm

60 x 60 x 25mm 120 x 120 x 25mm 80 x 80 x 25mm 120 x 120 x 38mm

Panasonic FA components:

As with all Panasonic products,

extremely rigorous testing during

the demands that will actually be

for the long life of the product in

the application.

placed on them. This is a guarantee

development that far exceeds

the FA components undergo

**LONG-LIFE QUALITY** 

- Effortless network integration with a variety of terminal station
- 6 digital I/Os available for the PNP I/O unit, 8 I/Os for the NPN I/O unit
- Simple, fast configuration of complex wireless networks
- ter, and 31 terminal stations can be connected to each slave. In total, 254 terminal stations can be connected to a single master.
- Wiring expenses practically eliminated
- Parametrization via integrated, easy-to-use Configurator KR
- · Antenna extension cable





# AC & DC fan motors

Panasonic fan motors in seven different sizes, various operating voltages and rotation speeds leave no wishes unfulfilled. So be cool and stay cool.









### Main characteristics:

- Rated operating voltages: 100, 115, 200, 220, 230, 240VAC Universal 50 / 60Hz applications
- Three rotation speeds per model
- Frame: aluminium alloy die-casting
- Long lifetime
- Quiet operation Optional: connect via cable (length 300mm) or "Faston"
- connector 92 x 92 x 25mm

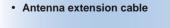
60 x 60 x 30mm 120 x 120 x 25mm 80 x 80 x 25mm 120 x 120 x 38mm 80 x 80 x 38mm 150 x 172 x 38mm

# **KR20** wireless unit

# Main characteristics:

- Lightning-fast, high-security 2.4GHz transmission

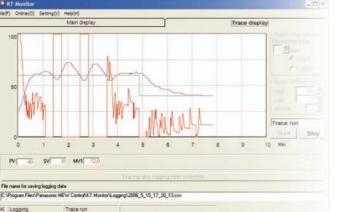
- Via RS485, up to 99 KR20 slaves can be connected to each mas-
- Range extension through repeater function
- KR20 Accessories Antenna
- Antenna with cable



® **FLI**® c **FLI**® us

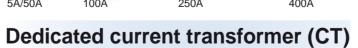


# KT Monitor - Software for KT4H/KT4B

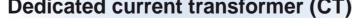












CT is not included with the product.



RS485 communication por

# Counters & hour meters

Panasonic counters are flexible, reliable and providential. Different models allow application in various areas. Outstanding quality you can count on.



Main characteristics:

- Operating modes: 5 input modes
- LC4H-W: **Independent 2 inputs** per and lower limits)
- LC4H-S: with scale factor connect photo-sensors,



with a changeable panel cover

# LC4H/LC4H-S/LC4H-W

- Two-stage presetting (up-2 outputs
- & 12VDC power supply, to

- encoders Bright, easy-to-read and 2-color LCD display
- 4- or 6-digit display
- 48 x 48 x 64.5mm/ 48 x 48 x 70.1mm



# LH2H/LH2H preset type

### LH2 H:

- proximity switches or 24VAC - 240VAC

- Operation voltage: 24VDC DIN half-size
- Output: no output ■ Reset: yes / no
- Switchable time range &
  - green) backlight • 8.7mm character height

LH2H preset:

- Changeable panel cover
- Transistor output: 100mA, 30VDC, PNP/NPN

switchable 2-color (red/



DIN half-size counters

Switchable 2-color (red/green) backlight

# LC2H/LC2H preset type

Main characteristics:

- Operation modes: addition with or without reset
- Input signals: non-voltage,

LC2H preset:

- Operating voltage:
- built-in battery or 3VDC
- Operation modes: Addition / Subtraction
- 8-digit easy-to-read display 8.7mm character height
- DC voltage, free voltage Preset value setting
  - Operating voltage: 24VDC Input signals: non-voltage or open collector
  - Changeable panel cover

Round shape

Use Panasonic's ruggedly designed hour meters to record operating hours, keep costs transparent and ensure that ser-



# Main characteristics:

- Operation voltage: built-in battery; 4.5VDC - 30VDC,

- Battery life: 10 years



# TH1/TH2/TH4/TH5/TH6

Main characteristics:

- Various operation voltages: 12VAC-240VAC
- Output: no output
- Display: 5 or 6 digits Quick and easy to install



Main characteristics:

Reset: yes / no

Operation voltage: 12VDC and 24VDC

Display: 5 digits

62mm ø x 87.5mm





North America Europe Asia Pacific China

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Switzerland

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# **Panasonic** ideas for life

# **OVERVIEW AUTOMATION COMPONENTS**



# Digital & analog timers

Panasonic's digital and analog timers qualify particularly in precise and simple settings and control systems. The multivarious product range offers the right equipment for your needs at any time.





- Main characteristics: Operating voltage: 12VDC - 24VAC/DC,
- Up to 8 operation types
- Configurable time range: 0.001s to 999.9h and 0.01s to 9999h

100VAC - 240VAC

Dimensions: On panel & socket mounting

Easy-to-read

• 2-color LCD display

2 independent timing

• LT4H-W → Twin:

- functions available PM4H-M: 5 operation modes
- 48 x 48 x 65.5mm / 48 x 48 x 70mm

simultaneously



110 - 120V. 200 - 220V. 220 - 240VAC

• S1DXM-A:

Power ON delay operation • S1DXM-M:

4 operation modes QM4H-S with MODE switch

stopsignal input Dimensions: 48 x 48 x 85.4mm, pin type

0.01s to 9990h

• 8 time ranges selectable

QM4H-G with reset and

Instantaneous contact



QM4H

Main characteristics:

12VAC DC - 48VAC/DC.

100VAC/DC - 240VAC/DC

• Protection: IP40, with cover

Operating voltage:

Operation modes:

Power ON delay

From April 1st 2009, Panasonic Electric Works Co., Ltd. expanded its warranty period for its FA automation control products from current 1 year to 3 years.





### Main characteristics:

Operating voltage: 12VDC - 24VAC/DC.

PM4H/PM4H-W

- PM4H-W: Cyclic Twin Timer 100VAC - 240VAC ● Time range: 0.1s - 500h
- PM4H-A: 8 operation modes



PM4H-S: Power ON delay

• Dimensions: 48 x 48 x

62.5mm / 48 x 48 x 66.5mm

### S1DXM

### Main characteristics:

Operating voltage: 12, 24VDC as well as 24V,

> 22.1 x 28.5 x 52.7mm • Terminal: pin type /

> > solder terminal Useable with HJ relay terminal socket

0.05s to 10h

Dimensions:

• 4 different time ranges:



Main characteristics:

PM5S-A: 6 operation modes
 PM5S-S: Power ON delay

● PM5S-M: 6 operation modes ■ Time range: 0.1s to 500h

(with instantaneous contact) • Dimensions: 75 x 22.5 x 98.5mm

For detailed information, please refer to the main catalogs or www.panasonic-electric-works.com

For detailed information, please refer to the main catalogs or www.panasonic-electric-works.com