



MURPHY

CONTROLS & INSTRUMENTS
CONDENSED CATALOGUE



Reliable. Innovative. Customer Focused.

FW Murphy provides instrumentation and controls for engines and engine-driven equipment. But we're not just a manufacturer. We design and deliver products to exceed the expectations of our customers and become their "Preferred Partner".

Murphy innovation started in 1939 with the renowned Swichgage®, designed by Frank W "Pat" Murphy to give accurate, reliable engine indication and protection. Our product range has since expanded to include shutdown devices, electronic controllers, start/stop panels and much more.

And our innovation continues today. Murphy were the first to develop cutting-edge displays and gauges for J1939 CANbus data, as used in the latest electronic engines. Our MurphyLink™ and award-winning PowerView™ products continue this advance into new engine technologies.

Murphy has a proven history of reliability - products designed and built to meet the highest durability standards, and operate time after time, in demanding applications such as construction and agricultural vehicles, industrial pumping, power generation and marine propulsion.

Customer needs drive our research, development and forward thinking. Continuous improvements in lean manufacturing, supply chain integration and global sourcing keep Murphy products and service at the leading competitive edge.

For more information on our instruments and controls, or to discuss OEM-specific solutions, contact Murphy today or visit www.fwmurphy.co.uk



Displays and I/O modules

For ECU/CAN-based engines
www.fwmurphy.co.uk/displays

PowerView PV450, PV750



- Full colour TFT display, bonded & coated for bright daylight visibility, portrait or landscape - PV750: 7" WVGA - PV450: 4.3" WVGA



- Integrates data from engine, transmission, GPS, video & other devices
- SAE J1939, CANopen, NMEA2000 and freeform CAN



- PAL/NTSC video, USB, RS485 Modbus and analogue/digital I/O
- IP67, -40 to +85°C
- PowerVision™ software suite allows full OEM-customisation of display graphics, workflows & CAN data

PowerView PV101



- LCD readout of J1939 engine data
- Selectable English, French, Spanish, German or Italian, Chinese, Japanese, Russian, Portuguese & Czech options.



- 'Plug-and-go' wiring harness system
- Ultra-bright LEDs for warning & shutdown
- RS485 Modbus, master (for PVA/PVM gauges) or slave
- IP68, -29 to +85°C
- Tier 4/Stage IIIB/IV DPF regen option

PowerView PV10



- Basic diagnostics for J1939 engines
- LCD display of hours run, active and stored faults (SPN, FMI, OC)
- LED indication of alarm and shutdown faults

CAN J1939 Input/Output Modules

CANdrive™



- Converts J1939 CANbus data into standard electric gauge outputs
- Compatible with Murphy, VDO and Datcon gauges
- Optional LED fault indication

PDM



- Power Distribution Module for CAN display input/output expansion & control
- CAN & LIN communication
- 8 analogue, 12 digital inputs
- 12 solid-state protected outputs, rated 13A / 25A

Gauge & Switchgauge®

Analogue scale indication for ECU/CAN and mechanical engines.
www.fwmurphy.co.uk/gauges

PVCAN, PVA, PVM series



- Analogue-style panel gauges for CAN J1939 & PowerView display systems
- 2.3" (59mm) gauges, 3.6" (92mm) for tach & speedo
- High accuracy stepper-motor technology
- 4-wire connection, power + CAN/RS485
- Lens & bezel options

EG(S)21 series



- Electric gauge (EG21) & Switchgauge (EGS21)
- 2" (51mm) dial face
- Pressure, temperature, fuel level, Volts, Amps
- Sealed, rugged polycarbonate case
- Driven by ES series resistive senders or CANdrive J1939 interface module

20, 25 series



- Mechanical Switchgauge
- Accurate & reliable
- 2" (51mm) or 2½" (64mm) dial face
- Plated steel case
- Grounding contacts, optional snap switch
- Pressure, vacuum, differential pressure and temperature

A20, A25 series



- Mechanical Switchgauge
- Accurate & reliable
- 2" (51mm) or 2½" (64mm) dial face
- Sealed polycarbonate case
- Insulated contacts, optional snap switch
- Pressure, vacuum, differential pressure

FuelCAN, MeCAN, SenderCAN



- Integrates analogue/resistive sender and switch control signals into J1939 CANbus systems & instruments
- Standard versions for fuel level, oil pressure, coolant temperature & speed sensors
- Custom models to OEM specification
- Compact, epoxy-filled models for surface or in-harness mounting

XM500



B series



- Gauge only, no switch contact
- 2" (51mm) dial face
- Plated steel case
- Environmentally sealed
- 20BPG pressure & 20BTG temperature

OPL/45 series



- Mechanical Switchgauge
- 4.5" (114mm) dial
- Adjustable high and low limit contacts
- Pressure and temperature models
- Panel and surface mounted versions

Exhaust Pyrometers



- 3½" (89mm) dial face
- K type thermocouples
- Single and dual (L-R) scale versions
- Optional pyroswitches

AT series



- 3½" analogue scale tachometers
- ATA senses from charger alternator
- ATS senses from magnetic pickup
- digital hourmeter on models ATHA & ATHS
- Backlit display
- 12V DC, or add ATVC for use with 24V DC

Digital tachometers



- Models MT90, MTH6 and SHD30
- LCD indication of RPM
- Hourmeter models
- Overspeed trip models

TM series



- 2" (51mm) hourmeter
- mechanical action with quartz timing
- sealed case
- 12/24V DC operation



Controls

Electronic control modules, shutdown devices, actuators and battery chargers.

www.fwmurphy.co.uk/controls

Keystart



- 7210 & 9610 series
- Keyswitch start & stop for mechanical engines
- Auto fault shutdown and indication
- Optional overspeed shutdown, using generator AC freq. or magnetic pickup
- Timed preheat output
- DIN 72 x 72mm or 96 x 96mm cases

CANstart™



- 9630 & 9640 series
- Manual and automatic start/stop for engines, gensets or pumps
- SAE J1939 CANbus compatible
- Auto fault shutdown and indication
- Drives panel gauges from J1939 data (tacho, oil pressure & coolant temp)
- DIN 96 x 96mm case

ASM150/170



- Auto start & stop
- Auto fault shutdown and indication
- Metal case with epoxy encapsulation
- 12 or 24 VDC

CASCADE



- Programmable, micro-processor based
- Auto or manual control
- For electronic (J1939) or mechanical engines
- Encapsulated & environmentally sealed
- IP65, -40 to +85°C

EMS-PRO



- For diesel driven pumps, J1939 electronic or mechanical engines
- automatic start/stop
- backlit graphic display
- programmable options and parameters
- shutdown history and service reminders
- TSC1 throttle control
- inputs: 8 digital, 12 analogue, 1 frequency
- outputs: 3 FET, 9 relay
- TSC1 throttle control
- IP66, -40 to +80°C

Battery chargers

See also www.computroniccontrols.com



- Computronic Controls fully automatic, multi-stage charging
- 12 or 24 VDC, vented lead acid, VRLA or NiCd
- 3 to 30 Amps
- open-frame or enclosed versions
- low ripple models for VRLA batteries
- charge monitoring & alarm output options
- auto boost and temp. compensation options
- UL, CSA, NFPA compliant models

Tattletale



- Magnetic switches for shutdown and annunciation

SV12, SV24



- Solenoid operated fuel valves
- 12V & 24V versions
- 3/8BSPT, 1/4NPT, 14mm fittings

RP series



- Rack pullers
- Solenoid control for fuel rack, injector pump or air valve
- RP75 (left above): 30lbf (133N)
- RP23xx (left below): 11-34 lbf (49-151 N)

AT03069



- For automatic engine throttle control
- Universal 12/24 VDC power supply
- Adjustable travel, 30 - 57 mm

Process Monitoring

Engine-mounted fluid level controls, fault switches

www.fwmurphy.co.uk/process

L150, EL150K1, EL150EX



- Fluid level switch and indicator for oil, water or diesel fuel
- Low level contacts for warning/shutdown
- Grounding contact or SPDT snap-switch
- Float adjustment for testing contact/alarm

LM500



- Automatic oil level maintainer
- Oil level indication by large sightglass
- Low level switch for alarm/shutdown, with optional test facility
- ATEX hazardous area model

L129



- Sightglass indication of oil level
- Adjustable high and low level contacts for warning/shutdown
- L129 has 1 wire, grounding to case on high or low level
- L129CK1 has 3 wires, high/low contacts + insulated common

LM300 series



- Maintains correct oil level for larger engines
- Sightglass indication of oil level
- Low and high level alarm switch options
- Hazardous area versions available

MLS



- Float switches for gas scrubber or general fluid level control applications
- Magnet-operated, seal-free construction
- Stainless steel, 304 cast equivalent body, 304 float
- CSA (C/US) hazardous area approved

Vibration and shock switches



- Models 20.SS, VS2, VS94 & EVS
- For monitoring equipment shock and vibration
- Local and remote reset options
- ATEX, UL and CSA hazardous area approvals



s, sensors and accessories.

Speed switches



- Models 3ST, SS300, HD9063 & OS77D
- Mag. pickup or charge alternator driven
- 1, 2 or 3 relay outputs
- For starter release, load control or over-speed shutdown

Transducers & transmitters



- Magnetic pickup speed transducers
- PXT pressure transmitter, 4-20mA
- Thermocouples, J and K type
- RTD resistance probes, 3 wire Pt100
- RTDT 4-20mA transmitter for RTD probes

Senders



- ES series resistive senders
- Measurement of
 - oil pressure
 - coolant temperature
 - fuel level
- For use with
 - EG(S) gauges
 - FuelCAN
 - MeCAN™
 - SenderCAN™
 - displays
 - controllers

Fault switches



- Engine mounted
- Pressure:
 - 76.PS series
 - PSB series
- Temperature:
 - 76.TS series
 - TSB series

Connections and fittings



- DHK deluxe oil line
- thread adaptors
- hose fittings
- CKV non-return check valves
- PRV pressure relief valves

PD81xx series



- Pressure pulsation dampener
- Eliminates gauge pointer flutter
- Protects gauges against short pressure surges

Panel Systems

Complete control and instrument packages for ECU/CAN and mechanical engines.
www.fwmurphy.co.uk/panels

M series



- For ECU/CAN-based engines
- Based on PowerView series components
- Plug-and-go panels & harnesses for most major engine types

B6468/B6502/B6503



- For Caterpillar and Perkins stationary engine applications
- Model B6468
 - for non-ECU engines
 - Keystart controller
 - auto fault shutdown
 - hours run counter
- Models B6502 & B6503
 - for ECU-based (J1939) engines
 - CANstart controller
 - PV101 display
 - TSC1 speed control
 - Auto start/stop option
 - Complete with engine ECU mating harness

Auto pump panels



- Model B6455 (12V)
- Auto start & stop, from single contact or high & low float switches
- Auto fault shutdown and indication
- Tachometer
- Charge fail excitation and warning lamp

Diagnostic centres



- Keyswitch start & stop
- Auto fault shutdown
- Basic, intermediate & advanced instrument levels
- Charge alternator excitation and warning lamp

75160x series



- 751602:
 - 518APH shutdown
 - 20P oil pressure
 - 20T coolant temp
- 751603: as above +
 - 20PHL pump pressure

Irrigation pump panels



- For diesel-driven irrigation pumps
- Manual start
- Auto shutdown by timer or engine/pump fault
- Based on mechanical Swichgag® or PS660 micro-controller
- Enclosed and open-frame versions

WD series



- For mobile and stationary engines & pumps
- Manual start & stop
- Swichgag indication of oil pressure, coolant temperature and (optional) pump pressure,
- Automatic fault shutdown/warning
- Optional pump start override timer
- Optional warning lamp and delayed shutdown for mobile applications

Custom panels/dashboards



- Custom control panels, dashboards & instrument clusters
- For stationary, mobile & marine applications
- Solutions for both ECU (J1939) and non-ECU engines



Alarm devices



- TL7 flashing lamp
- SAH Mini-Siren®



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USA-ISO 9001:2008 FM 28221
UK-ISO 9001:2008 FM 29422
CHINA-ISO 9001:2008 FM 523851
Registered Facilities

ISO 9001
REGISTERED



INVESTOR IN PEOPLE

www.fwmurphy.co.uk

In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.

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