

EX SOLAR CHARGE CONTROLLER

24 or 48Vdc

Space efficient natural cooled high-tech modular battery charger system with optimized electrical performance and no maintenance by design. Completely designed for reliable operation in harsh environment and ATEX/IECEx certified for hazardous area.



KEY FEATURES

- Maximum power point tracking (MPPT) or Pulse wide modulation (PWM) technologies are applied for optimal performance
- Suitable for installation offshore/desert and other harsh environments
- Use multiple modular units in N+1 or dual/triple redundant system configurations
- Extremely reliable and high availability due to modular setup
- Natural cooling design optimizes reliability, not reliant on forced cooling
- Maximum safety with Ex-d and Ex-e enclosures

STANDARDS/CERTIFICATION

- Cenelec EN 60079-0, EN 60079-1 and EN 60079-7
- KEMA 02ATEX2103 X; ATEX [expr] II 2G Ex de IIB T6
- IEC 60079-0, IEC 60079-1 and IEC 60079-7
- IECEx KEM 09.0089X; Ex de IIB T6
- ABNT NBR IEC 60079-0, ABNT NBR IEC 60079-1 and ABNT NBR IEC 60079-7 (optional)
- Inmetro NCC 16.0160 X (optional)

PERFORMANCE CHARACTERISTICS

- Each solar regulator module is provided with automatic current limiting
- Maximum power point tracker efficiency up to 99%
- Wide ambient temperature range, -40 to +55°C
- Temperature charge voltage compensation
- Voltage drop compensation by battery voltage measurement

PHYSICAL CHARACTERISTICS

- Solar regulator modules and DC distribution pre-assembled onto free-standing support frame
- Different Ex enclosure configurations and support frame designs possible
- Degree of protection: IP66
- Available in front access aluminium alloy Ex-d enclosures pre-installed on floor mounted frames, stainless steel 316 Ex-d enclosures are optional
- Stainless steel 316 Ex-e enclosures pre-installed for easy bottom or top cable entry
- Orga standard or customer specific paint options

ELECTRICAL CHARACTERISTIC

- Input voltage (Solar): up to 150Vdc peak (other voltages on request)
- Nominal system voltage: 24 or 48 Vdc (other voltages on request)
- Power rating: Per customer requirements (modular) Suitable to charge all major battery technologies (Nicad, VRLA, LA)
- Output protected from reverse current

SYSTEM DESIGN, CONTROL AND MONITORING

- EX certified window and LED's provide comprehensive measurement, indication and fault monitoring information on battery charger, battery and distribution sub systems on front of Ex-d enclosure
- Surge arrestor and disconnect switch provided on each solar input
- Datalogger to record and store key system status changes (optional)
- Serial communication facilities using Modbus over Ethernet, via UTP (copper) (optional)
- Serial communication facilities using Modbus, via RS-485 (copper) (optional)
- Custom system setups and integrated DC distribution available
- Optional battery system pre-installed in separate Ex-e battery enclosure



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