



Sigmadrive

AC Induction Motor Controller

Features:

- Reliable, single-board IMS construction
- Integral heat sinking of all controller components
- No internal interconnections
- Advanced Sequential Phase Control algorithm
- Real-time, high resolution current management
- High efficiency, low-loss design
- High continuous current rating
- Exceptional thermal performance
- Ultra low profile, compact packaging
- Flash memory
- CANBUS communications
- Fully programmable
- Speed & torque control
- Single and dual motor traction
- Variable speed pump control

Customisable Options:

- LCD dashboard display
- Additional I/O module
- Electric Power Steer module
- Hand held programmer
- OEM software solutions



PG Drives Technology is delighted to announce the new Sigmadrive family of motor controllers and ancillary products, which have been developed specifically for applications such as forklift trucks, warehouse trucks and tow tractors.

Sigmadrive is a range of advanced, high efficiency 3-phase AC induction motor controllers that use Insulated Metal Substrate (IMS) technology to provide superior performance and exceptional reliability. The innovative design eliminates all interconnections and provides integral heat sinking of all components and terminals, greatly increasing reliability and providing a superior continuous current rating in a very compact, low profile, rugged package.

A unique feature of Sigmadrive is the highly advanced Integrated Current Control system (ICC), which provides continuous, real-time monitoring and control

of the voltage and current delivered to the motor. The ICC also protects Sigmadrive instantly against damage from any possible overcurrent fault condition.

Smooth, confident and efficient vehicle control is assured due to the intelligent Sequential Phase Control techniques (SPC) employed by Sigmadrive's powerful microprocessor. This highly efficient control technique, and the low-loss circuitry increase vehicle range and working time per charge when compared to other AC controllers.

Sigmadrive AC is available in a range of versions from 24V/125A to 120V/650A.

Sigmadrive controllers are also available for permanent magnet, series and separately excited (SEM) motor types.



PG DRIVES TECHNOLOGY

SPIRENT
Communications



Sigmadrive

MODELS	Battery Voltage	Current 2 min.	Current 1hr	Size
TRACTION				
ACT950L	96/120V	500A	200A	Large
ACT865L	72/80V	650A	240A	Large
ACT835M	72/80V	350A	120A	Medium
ACT465L	24/48V	650A	260A	Large
ACT445M	24/48V	450A	180A	Medium
ACT425S	24/48V	250A	80A	Small
PUMP				
ACP950L	96/120V	500A	200A	Large
ACP865L	72/80V	650A	240A	Large
ACP835M	72/80V	350A	120A	Medium
ACP465L	24/48V	650A	260A	Large
ACP445M	24/48V	450A	180A	Medium
ACP425S	24/48V	250A	80A	Small
EPS (Electric Power Steer assist)				
ACE817S	72/80V	175A	60A	Small
ACE425S	24/48V	250A	80A	Small

SPECIFICATIONS

Switching Frequency:	16KHz (motor)
Digital Inputs:	7
Analogue Inputs:	3
Contactor driver Outputs (3A each):	Large: 3, Medium: 3, Small: 2
Environmental Rating:	IP55
Operating Temperature Range:	-30°C to 40°C
Storage Temperature Range:	-40°C to 70°C
Vibration:	6G, 40-200Hz, 1 hour
Weight:	Large: 6.1Kg, Medium: 4.1Kg, Small: 1.2Kg

ABOUT PG DRIVES TECHNOLOGY

PG Drives Technology, formerly known as Penny & Giles Drives Technology, has been designing, manufacturing and marketing sophisticated motor speed controllers for battery powered electric vehicles since 1976. PGDT are the world's No.1 manufacturer of powerchair and scooter control systems for the medical mobility market, and a leading manufacturer of integrated control systems for floorcare machines and mobile elevating work platforms. PGDT provides excellent post-sales support and service across the globe from its offices in Europe, the USA, Taiwan and Hong Kong.

DIMENSIONS

Large



Medium



Small



*All dimensions in mm



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