

- **Advanced drive control algorithm**
- **Easy installation**
- **Choice of power ratings, up to 200A max.**
- **Extremely compact package**
- **On-board diagnostics**
- **Industry-standard connectors across the entire range**
- **Electronics sealed to IPX5**
- **Connection system sealed to IPX4**
- **TruCharge display output**



#### **Advanced drive control**

The S-Drive utilizes an advanced motor control algorithm to provide exceptional drive performance. Smooth, precise drive control is assured on all surfaces and gradients, and roll-back when starting on inclines is almost totally eliminated. This ensures the S-Drive provides a very safe and comfortable driving experience.

#### **Easy installation**

The space available on any scooter is often at a premium. Therefore, to minimize the space requirements of the controller the battery and motor connectors are recessed on top of the unit making efficient use of the available area and decreasing the total space required for the controller and its associated wiring. The S-Drive uses Molex connectors for the signal wiring across the entire product range. The motor and battery connections differ based on the power rating of the product, but all are widely available throughout the world.

#### **Choice of power ratings**

Over the years, PG Drives Technology has expanded the S-Drive range to include products suitable for small, transportable scooters right up to the largest and fastest models on the market. The S-Drive is available in 45A, 70A, 90A, 120A, 140A and 200A current ratings, giving the scooter OEM a cost-effective choice of controller right across the performance range.

#### **On-board diagnostics**

The on-board diagnostic system can store and display information relating not only to the S-Drive, but also for the other electrical components of the scooter. The S-Drive's on-board diagnostic system records the number of occurrences of the last eight detected system problems. This can be viewed by connecting a programming tool, in order to provide assistance when attempting to diagnose intermittent vehicle faults. A run timer is also included, so that the total number of hours the motor has been driven is recorded.

## Water-resistant system

The S-Drive controller can be fitted with an optional water-resistant sealing system, which protects the connectors against ingress of water to IPX4. This sealing system comprises of a cover and a slotted gasket to seal the cables and connectors and can be fitted or removed without disconnecting any of the wiring. This solution allows the S-Drive to operate safely and reliably in the harshest environmental conditions.



## TruCharge display

The TruCharge display offers an accurate representation of the charge remaining in the batteries. Unlike most simple voltmeter displays, the user is presented with a display comprising 3 red, 4 yellow and 3 green LEDs which provide an intuitive display, thus inspiring confidence in the battery status. The display also provides diagnostic information by flashing the LEDs that help identify possible problems with the scooter.



## PRODUCT CODES

### S-DRIVE

S45	45A max. current
S70	70A max. current
S90	90A max. current
S120	120A max. current
S140	140A max. current
S200	200A max. current

### SUPPORT PRODUCTS

S COVER: S45/S70/S90	Water-resistant sealing system
S COVER: S120/S140	Water-resistant sealing system
S COVER: S200	Water-resistant sealing system
TILLER MODULE 1	TruCharge display, encased
TILLER MODULE 2	TruCharge display, PCB
S MOLEX	Molex® Mini-Fit, Jr™ connector kit
D51070	S120/S140 battery connector kit
D51059	S120/140 motor connector kit