## SEPARATELY EXCITED ELECTRONIC MOTOR SPEED CONTROLLER

MODEL 1268 SepEx ${ }^{\circledR}$


## DESCRIPTION

Curtis PMC Model 1268 SepEx® controllers are programmable and microprocessor based, with an advanced MOSFET power section for smooth and seamless control of separately excited motors.

## APPLICATION

Curtis PMC 1268 SepEx® controllers are designed for use in heary-duty golf/utility vehicles.

## FEATURES

- Power MOSFET technology provides smooth, silent, efficient, and cost-effective operation.
- Adjustable parameters enable custom optimization of speed, torque, and braking control.
- Half bridge armature and full bridge field provides regenerative braking down to zero speed.
- Sealed package rated at IP64 and IP67.
- Overspeed braking (regenerative) limits speed while driving downhill.
- WalkAway ${ }^{\text {TM }}$ braking feature limits any stopped or key-off rolling to very low speed.
- System uses Hall effect speed sensor on motor or drive train to control vehicle speed.
- Tow switch enables free rolling for towing of vehicle.
- Anti-rollback function provides improved control when throttle is released on hills.
- Anti-stall function helps prevent motor commutator damage.
- Controller drives warning buzzer - steady in reverse; intermittent during WalkAway ${ }^{\text {TM }}$ braking.
- Optional electromagnetic brake output.
- Optional brake light output.
- MultiMode ${ }^{\text {TM }}$ inputs provide for multiple speed and power modes of operation.
- Timed shutdown of main contactor after pedal is released and vehicle has stopped.
- LED status indicator with external output.
- Fully compatible with 1311, 1314 and 1307 Programmers for parametric adjustment, tuning, test, and diagnostics.
- Extensive fault detection and diagnostic reporting using a Curtis Programmer including (partial list):
- Main contactor weld check and driver check
- Throttle and wiring faults
- Open or shorted motor field winding
- Open motor armature winding
- Over-temperature
- Missing or failed speed sensor
- Armature drive failure.


## MODEL 1268 SepEx ${ }^{\oplus}$

## FEATURES continued

- Extensive system monitor capabilities using a Curtis Programmer, including (partial list):
- Battery voltage
- Throttle input
- Direction and throttle switch operation
- Motor field and armature currents
- Controller heatsink temperature


## OPTIONS

- External LED for remote status indicator.
- Warning buzzer for audible indicator of reverse and WalkAway ${ }^{\text {™ }}$ modes.
- Brake lamp relay to drive external lights for visual indicator of braking conditions.
- Electromagnetic brake at 24 V or 48 V (programmable) to lock vehicle at rest.
- WalkAway ${ }^{\top M}$ braking feature to slow vehicle during key-off.
- 5K 3-wire, 0-5V, or ITS throttle.


## Meets or complies with relevant US and International Regulations

- Manufactured under ISO 9001 certified Quality Management System.
- UL Recognized Component Status.


## MODEL CHART

Curtis PMC Model
1268-54xx
1268-55xx

## Voltage <br> (Volts)

36-48
36-48

Armature Rating (Amps) 2 Minute

400
500

Field Rating
(Amps) 2 Minute

50

TYPICAL WIRING DIAGRAM


## MODEL 1268 SepEx ${ }^{\oplus}$

## DIMENSIONS mm



WARRANTY Two year limited warranty from time of delivery.

