



Ym

Actuators

(T)

Magnetic Pickups

AAR

AAA

Gaseous Control Systems

Generator Controls



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| ACTUATORS |
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ACTUATORS

DESIGNED TO OUT LIVE THE LIFE OF THE ENGINE

High performance is achieved when a speed control system incorporates a GAC actuator coupled with a GAC speed controller. The design baseline for GAC actuators incorporates fast responses, multi-voltage usage, and proven reliability. All of GAC actuators are easy to install with no maintenance required.

THROTTLE BODY

The ATB Series integral throttle body electric actuators are designed to control the air or air/fuel mixture to a gas or gaseous-fueled engine. The ATB Series actuator directly drives an integrated throttle plate, which is ensured to return to the minimum fuel position with a spring return when the actuator becomes de-energized. Units are available with throttle plate position feedback sensor, higher temperature rating, and internal sealing for turbo-charged applications.

ATB T1 Series

- 12 or 24 VDC
- 25mm to 40mm Bore Size
 - Packard Connector
- Sealed to 5.0 Bar

| Product No. | Description |
|---------------------|--|
| ATB251T1N-12 or -24 | 25mm / Sealed |
| ATB301T1N-12 or -24 | 30mm / Sealed |
| ATB351T1N-12 or -24 | 35mm / Sealed |
| ATB401T1N-12 or -24 | 40mm / Sealed |
| ATB251T1F-12 or -24 | 25mm / Sealed / Position Feedback Sensor |
| ATB301T1F-12 or -24 | 30mm / Sealed / Position Feedback Sensor |
| ATB351T1F-12 or -24 | 35mm / Sealed / Position Feedback Sensor |
| ATB401T1F-12 or -24 | 40mm / Sealed / Position Feedback Sensor |

ATB T4 Series

- 24 VDC 75mm to 120mm Bore Size
- MIL Connector
- Sealed to 5.0 Bar, High Temp

| Description |
|---|
| 75mm / High Temperature / Sealed |
| 85mm / High Temperature / Sealed |
| 95mm / High Temperature / Sealed |
| 110mm / High Temperature / Sealed |
| 120mm / High Temperature / Sealed |
| 75mm / High Temperature / Sealed / Position Feedback Sensor |
| 85mm / High Temperature / Sealed / Position Feedback Sensor |
| 95mm / High Temperature / Sealed / Position Feedback Sensor |
| 110mm / High Temperature / Sealed / Position Feedback Sensor |
| 120mm / High Temperature / Sealed / Position Feedback Sensor |
| |

ATB T4 Series now includes bore sizes down to 75mm. For 75mm ATB T3 contact GAC.

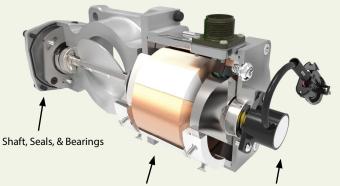
ATB T2 Series



- 12 or 24 VDC
- Position Indicator Available
- 45mm to 65mm Bore Size
- Packard Connector
- Sealed to 5.0 Bar

| Product No. | Description |
|-----------------------|--|
| ATB452T2N-12 or -24 | 45mm / Sealed |
| ATB552T2N-12 or -24 | 55mm / Sealed |
| ATB652T2N-12 or -24 | 65mm / Sealed |
| ATB452T2N14-12 or -24 | 45mm / Sealed / High Temperature |
| ATB552T2N14-12 or -24 | 55mm / Sealed / High Temperature |
| ATB652T2N14-12 or -24 | 65mm / Sealed / High Temperature |
| ATB452T2F14-12 or -24 | 45mm / Sealed / High Temperature / Position Feedback Sensor |
| ATB552T2F14-12 or -24 | 55mm / Sealed / High Temperature / Position Feedback Sensor |
| ATB652T2F14-12 or -24 | 65mm / Sealed / High Temperature / Position Feedback Sensor |

ATB T4 Series



No Gears, True Actuator

Non-Contact Position Sensor

ATB Feedback Upgrade Kits

| Product No. | Description |
|-------------|-----------------------------|
| KT552 | Add-On Kit - T2 / T3 Series |
| KT555 | Add-on Kit - T1 Series |
| KT556 | Add-on Kit - T4 Series |

See Actuator Accessories for Mating Connector / Harness & Installation Items.



PUMP MOUNTED

GAC's Pump Mounted Actuators are field proven proportional actuators designed to mount directly to fuel injection pumps to achieve an integrated proportional servo fuel package. Since the design has no sliding parts and its components are sealed; outstanding reliability results with no maintenance required.

| 100 Serie | s |
|----------------------------------|---|
| | For Stanadyne 'D' Series (DB, JDB, DC, DB2, DB4, DM2, DM4) Pumps Packard Connector |
| Product No. | Description |
| ADC100-12 or -24 | 12 or 24 VDC / Mounting Gasket GA102 Included |
| GA102 | Mounting Gasket for 100 Series |
| HW13-001 | 5 Star Torx Bit / Stanadyne |
| 103 Serie | |
| | For Delphi DPG, DPGE, and DP210G Pumps Packard Connector |
| Product No. ADD103B-12 or -24 | Description 12 or 24 VDC / Mating Connector Included |
| | |
| 137 Serie | s |
| | Shangdong Kangda BQ Style (BH4Q / BH6Q) Packard Connector |
| 0.5 | |
| Product No. | Description |
| ADD137BQK-R-12 or | -24 12 or 24 VDC / Right Side Stop Assembly / Installation Kit Included |
| 175/176 9 | Series |

- For Bosch 'P' and 'A' Style Pumps
- Connects Directly to the Fuel Rack
- Manual Shut-Off Mechanism
 - Packard Connector

| Product No. | Description | |
|---------------------------------------|---|--|
| ADD175A-12 or -24 | 12 or 24 VDC / Bosch 'P' Pump / Installation Kit KT289 Included | |
| ADD176A-12 or -24 | 12 or 24 VDC / Bosch 'A' Pump / Left Hand Rack | |
| ADE176AA-12 or -24 | 12 or 24 VDC / Bosch 'A' Pump / Left Hand Rack / Mating Connector / Cold Start Assist Solenoid | |
| Available Installation Kits on Page 7 | | |

See Actuator Accessories for Mating Connector / Harness & Installation Items.



275 Series

- Bosch 'P' 3000 7000 Fuel Injection Pump
- For Pumps on Engines up to 12-Cylinders
- Manual Shut-Off Lever

| Product No. | Description |
|-------------|---|
| ACB275C | 24 VDC / MIL Connector / Designed for MTU |
| ACB275H | Multi VDC / MIL Connector |
| ACE275H-24 | 24 VDC / Packard Connector |
| ACE275HD-24 | 24 VDC / Packard Connector / Heavy Duty Bearing Retention |
| ACE275J-24 | 24 VDC / High Torque Return Spring with Oil Drain Fitting |
| ACE275K | 24 VDC / Heavy Duty Bearing Retention / Packard Connector / Position Feedback Sensor |

295 Series

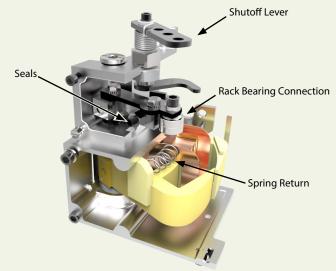


ACTUATORS

- Bosch 'P' 9 and 10 Pumps
- For Pumps on Engines up to 16 Cylinders
- Packard Connector

| Product No. | Description |
|--|------------------------|
| ACE295-24 | 24 VDC / Standard Unit |
| ACE295F-24 24 VDC / Position Feedback Sensor | |
| Available Installation Kits on Page 7 | |

175 Series



ENGINE MOUNTED

GAC's Engine Mounted Actuators exhibit a high quality construction design for high temperature applications and are uniquely optimized to outperform externally mounted electric actuators and other competitive designs. Since GAC's fast responding fuel control design has no sliding parts and its components are sealed; outstanding reliability results with no maintenance required.



ALR Series



- Pull Electrical Linear Actuators
- Mounts Directly to Engine's Fuel Pump in Place of Stop Solenoid
- Utilizes Precision Linear Ball Bearings instead of Bushings
 - Variable or Fixed Speed Control Over the Entire Engine Speed Range

| Product No. | Description |
|-----------------------|--|
| ALR160-S04-12 or -24 | 12 or 24 VDC / Packard Connector / Shibaura N843-C, N844L-C, N844LT-C |
| ALN190-F04-12 or -24 | 12 or 24 VDC / Normal Acting - Push / Packard Connector / Farymann 18 W Series |
| ALR190-103-12 or -24 | 12 or 24 VDC / Male Faston Terminals / Isuzu L-Series 3LB1 3LD1 3LD2 4LE1 4LE2 |
| ALR190-K04-12 or -24 | 12 or 24 VDC / Packard Connector / Kubota Super 05 Series, D905, D1005, D1105, D1105-T, V1305, V1505, V1505-T, and V3 Industrial Series V3300, V3600, V3600-T, V3800 (Not DI-T) |
| ALR190-KV03-12 | 12VDC / Packard Connector without Mating Connector / Kubota 03 Series V2003, V2203, V2403 |
| ALR190-KV07-12 | 12VDC / Packard Connector without Mating Connector / Kubota 07 Series V2607, V3007, V3307 |
| ALR190-M04-12 | 12 VDC / Packard Connector / Mitsubishi L-Series L2E, L3E, and S-Series S3L, S3L2, S4L, S4L2, |
| ALR190-P04-12 or -24 | 12VDC / Packard Connector without Mating Connector / Perkins 404D-15, 404D-22 & Caterpillar C2.2T, C3.4 |
| ALR190-P403-12 or -24 | 12VDC / Packard Connector without Mating Connector / Perkins 403D-15, 403D-15T & Caterpillar C1.7 |
| ALR190-Y04-12 or -24 | 12VDC / Packard Connector without Mating Connector / Yanmar TNV Series 2TNV70, 3TNV70, 3TNV76, 3TNV82A, 3TNV84, 3TNV84T, 3TNV88, 4TNV88, 4TNV98L, 4TNV98L, 4TNV98T & Isuzu C-Series 2CA, 3CA, 3CB, 3CD, 3CDT |





UNIVERSAL

GAC's Universal actuators are proportional electro servo designed for mechanical actuation of fuel system control levers. GAC's external actuators are simple to install and possess no sliding parts, resulting in outstanding reliability and no maintenance required.

104 Series

| | Small Engines (ex. Briggs & Stratton Engines, Kohler 12 - 30 HP Engines) < 25 msec Response 0.3 lb-ft [0.4 N-m] Torque 25° Rotation |
|------------------|---|
| Product No. | Description |
| ADD104-12 or -24 | 12 or 24 VDC / Packard Connector |
| | |

| 120 Series | Rotary Actuators |
|-------------------|---|
| | • For Engines up to 150 hp |
| | • 1.0 lb-ft [1.35 N-m] Torque |
| ADB120E4 ADC | For Small Inline Fuel Pumps or Carburetors |
| Product No. | Description |
| ACB120 | Multi VDC / MIL Connector / 25° Rotation / Sand-Cast Housing |
| ADB120 | Multi VDC / MIL Connector / 25° Rotation / Die-Cast Housing |
| ADB120E4 | Multi VDC / MIL Connector / Fuel Metering Valve / Cummins PT Fuel System |
| ADC120S-12 or -24 | 12 or 24 VDC / Commercial Connector / 25 ° Rotation / Serrated Shaft |
| ADD120S-12 or -24 | 12 or 24 VDC / Packard Connector / 25 ° Rotation / Serrated Shaft |

335 Series

| 1.1 | |
|------|--|
| | |
| 1.02 | |
| | |

- 2.90 lb-ft [3.9 N-m] Torque
- 65° Rotation
- **MIL Connector**

| Product No. | Description | |
|-------------|----------------------------------|--|
| ADB335-24 | 24 VDC / Standard Unit | |
| ADB335F-24 | 24VDC / Position Feedback Sensor | |

2001 Series

Product No. Description 24 VDC / 35 ° Rotation / Includes Lever LE2000 ACB2001

225 Series



- 2.2 lb-ft [3.0 N-m] Torque
- 25° Rotation
- < 45 msec Response
- For Multi-Plunger Fuel Pumps & Carburetors

| Product No. | Description |
|---------------------|---|
| ACB225 | Multi VDC / MIL Connector / Sand-Cast Housing |
| ADB225 | Multi VDC / MIL Connector / Die-Cast Housing |
| ADC225GS-12 or -24 | 12 or 24 VDC / Commercial Connector / Serrated Shaft / Lesser Rate Return Spring |
| ADC225GAS-12 or -24 | 12 or 24 VDC / Commercial Connector / Serrated Shaft / Lesser Rate Return Spring / Extended Stop 26° Rotation |
| ADC225JS-12 or -24 | 12 or 24 VDC / Commercial Connector / Serrated Shaft / Greater Rate Return Spring |
| ADC225KS-24 | 24 VDC / Commercial Connector / Serrated Shaft / High Temperature Applications |
| ADC225S-12 or -24 | 12 or 24 VDC / Commercial Connector / Serrated Shaft |
| ADD225GSC-12 or -24 | 12 or 24 VDC / Packard Connector / Lesser Rate Return Spring / With Mating Connector |

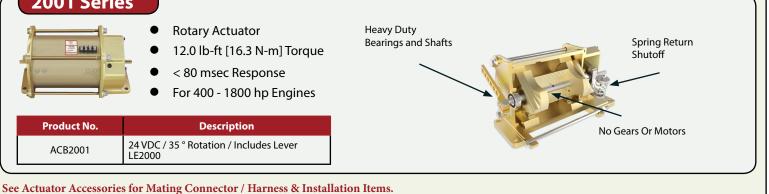
ALN Series



| Push Linear Actuators |
|-----------------------|
| |

- High Quality Anti-friction Bearings
- **Replaces Competitive Models**
- 22mm Stroke

| Product No. | Description | | |
|---------------------------------------|--|--|--|
| ALN025-12 or -24 | 12 or 24 VDC / 6.5 lbf. [3.0 kg] / 0.25 ft-lb [0.34 J] Work / Male Push-On Terminals | | |
| ALN050-12 or -24 | 12 or -24 12 or 24 VDC / 13.0 lbf. [6.0 kg] / 0.50 ft-lb [0.68 J] Work / Male Push-On Terminals | | |
| Available Installation Kits on Page 7 | | | |



ACTUATORS 6

ACCESSORIES - ACTUATORS

Cable Harnesses

| Product No. | Description | | |
|-------------|---|--|--|
| CH1203 | ACB/ADB Actuators - 12ft [3.7m] - 6 pin MIL Connector | | |
| CH1206 | ADC Commercial Actuators - 4ft [1.2m] Harness | | |
| CH1210 | Actuator - 12ft [3.7m] - 90° Connector (MIL) | | |
| CH1215 | Packard - Actuator Mating Half | | |
| CH1515 | AB Position Sensor Mating Half - 6ft [1.8m] Shielded / Feedback Sensor | | |
| CH251-2134 | ADC Commercial Actuators - 7ft [2.1m] Harness / 2-Terminal | | |

Threaded Rod

| Product No. | Description |
|-------------|---|
| RD102 | ¼ - 28 - Precut to 12 in. [0.3m] - Zinc Plated |
| RD233 | M6 Thread - Precut to 8.75 in. [222mm] - Zinc Plated |

Installation Kits

| Installation Kits | | | |
|--|------------|------------------|---|
| | Series | Product No. | Description |
| | ALN Series | BK265 | ALN025 Mounting Bracket |
| | ALN Series | BK266 | ALN050 Mounting Bracket |
| | ALN Series | KT130 | Clevis Kit Only - ALN025/050 |
| | ALN Series | KT231M | ALN050 Installation Kit - Bosch RSV - Left Side |
| KT289 | ALN Series | KT232M | ALN050 Installation Kit - Bosch RSV - Right Side |
| | 175 Series | KT153 | Motorpal Mi Series - PP4M10P1N13021 Fuel Injection Pumps - Plate, Linkage, and Mounting Hardware |
| | 175 Series | KT175-RS-R | ADD175 Series / Bosch 'RSV' Pump / Right Hand Rack / Mounts to Mechanical Governor Housing |
| 880 | 175 Series | KT175-RS-R-Zexel | ADD175 Series / Bosch RSV / RH Rack w/ Pump Gasket / ZEXEL / Mounts to Mechanical Governor Housing |
| KT275 | 175 Series | KT197 | ADD175 To Bosch EDC Governor |
| | 175 Series | KT289 | ADD175 / Installation Kit / for Bosch 'P' Pump |
| . . | 175 Series | KT-BYC | Adapter Kit - BYC ASIMCO Pumps - A, AD, P, P7100, PB197 - Adapter Plate, Gasket and Seal |
| | 176 Series | KT176A | Bosch 'A' Pump / Bearing Retainer Plate |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | 176 Series | KT176-A-RS-L | 176 Series - Bosch 'A' Pump / LH Rack / Mounts to Me- chanical Governor Housing |
| KT295 | 176 Series | KT291 | ADD/ADE176AA Installation Kit |
| | 180 Series | KT188 | Installation Kit / Included With Actuator / Freeze Plug & Hardware |
| | 225 Series | BK267 | Installation Bracket - 225 Series to Woodward Dyna 8000 Footprint |
| | 275 Series | KT275 | ACB275 - Bosch 3000 Pump / Camshaft Bearing Kit |
| | 275 Series | KT276 | ACB275 - Bosch 7000 Pump / Camshaft Bearing Kit |
| | 275 Series | KT278-1 | ACB275 Actuators - RP21 Pump Kit |
| ľ | 275 Series | KT3000-MT | MTU - Bosch P 3000 Bearing Retainer Kit - Plate, Gasket,- Seal, Shims and Installation Hardware |
| | 275 Series | KT7001-MT | MTU - Bosch P 7001 Bearing Retainer Kit - Plate, Gasket, Seal, Shims and Installation Hardware. |
| KT232M | 295 Series | KT295 | 295 Installation Kit - Spare (Included with Actuator) -Rack Linkages and Installation Hardware |

Mating Connectors



| EC1300 | ADD Actuators - Packard Mating Connector Kit | |
|--------|---|--|
| EC1310 | ADD Actuators - Packard Connector Replacement Kit | |
| EC1515 | ACE275K, ACE295F, ATBT2/T3-F, 175/176AF - AB Feedback Sensor Mating Half Connector | |
| EC1523 | ATB T1/T4-F, ADB335 Actuators - Feedback Sensor Mating Connector Kit - 3 Terminals | |

Levers

| | Product No. | Description |
|----------|-------------|---|
| Care and | LE1400-2 | 4.3in.[110mm] - ACB/ADB Actuators - 1/4in. [6.35mm] Holes / Serrated Shaft |
| | LE1400-4 | 3.3in.[84mm] - ACB/ADB Actuators - 1/4in[6.35mm] Holes / Smooth Shaft |

Bearing Rod Ends



| Product No. | Description |
|-------------|----------------------|
| BR200 | 1/4" I.D ¼-28 Thread |
| BR300 | M5 I.D. and Thread |
| BR400 | M6 I.D. and Thread |
| BR500 | M8 I.D. and Thread |

BK Series



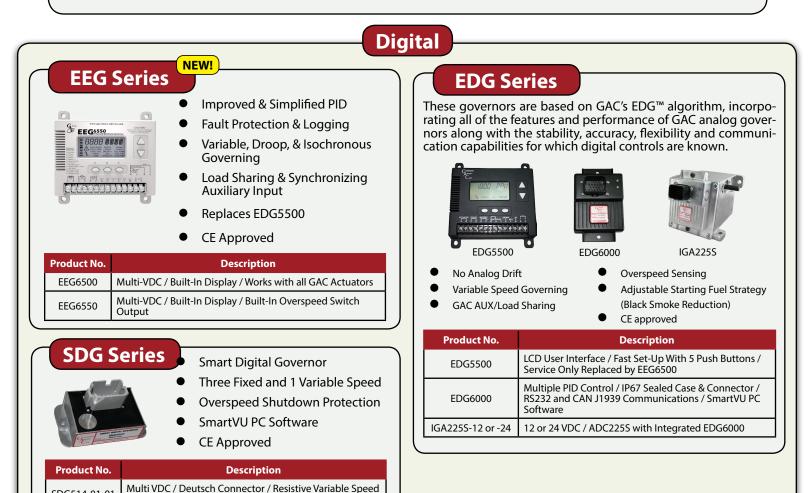
BK267

Custom Specific Installation Kits Available, Contact GAC

ACTUATOR ACCESSORIES 7

Governors

GAC's Speed Control Units are precise speed controls designed and manufactured in various configurations to meet application requirements using the latest analog and digital control technologies. Reverse battery polarity and fail-safe protection in the event of loss of speed sensor signal or battery voltage is incorporated in every GAC Speed Control Unit. A wide variety of application needs can be satisfied with GAC's constant or variable speed governing, in isochronous or droop operation. All circuit boards are hard potted or conformally coated to be vibration and moisture resistant.



ACCESSORIES

| Cable Harnesses | | | |
|-----------------|-------------|--|--|
| | Product No. | Description | |
| | CH1330 | Cable Harness for the SDG514 / SDG524 | |
| | CH1520 | Cable Harness for the EDG6000 | |
| | | | |

Multi VDC / Deutsch Connector / 0-5 VDC Variable Speed

Mating Connectors

Input (5KΩ)

Input

SDG514-01-01

SDG524-01-01

| | Product No. | Description |
|--|-------------|---|
| | EC1330 | Deutsch 12 pos. Mating Connec- tor for SDG514 / SDG524 |
| and the second s | EC1502 | 14-Pin Mating Connector for EDG6000 |



| Ana | log |
|---|--|
| FUCION | |
| FUSION | Series |
| The ESD5500-II analog speed controller Fusion Series line of controllers. The Fusi ESD control functions into a single versat | on Series updates and merges many |
| Gaseous & Diesel Applications Low and Normal Current Isochronous, Variable, & Droop Speed Ramping & Starting Fuel Selectable Dither Function, Lea Auxiliary Input For Load Sharing LED Indicators (MSP, Battery, Action) | ESD5520E ESD5526E d/Lag, & Soft Coupling g & Synchronizing |
| ECC Series WITTER INTERPORTED INTE | ESD2200 SectesImage: Sected and |
| ECC328-12 or -24 12 or 24 VDC / Light-Force (Low Current)) | ESD2210-12 or -24 12 or 24 VDC / Standard Unit |
| | ESD2241-24 24 VDC / Idle Circuit |
| ESD1000 Series | ESD2244-12 or -24 12 or 24 VDC / Light-Force (Low Current) |
| Isochronous Operation Only Gain Adjustment Hard Potted Terminal Strip or Leads CE Approved | ESD2400 Series • Isochronous Operation • Adjustable PID Functions • Speed Trim & Idle Control • Anti Wind-Up Circuit |
| ESD1000-12 or -24 12 or 24 VDC / Wire Leads | (Gaseous Engines) |
| ESD1100-12 or -24 12 or 24 VDC / Terminal Strip | Hard Potted |
| | CE Approved |
| ESD2100 | Product No. Description |
| | ESD2401-12 or -24 12 or 24 VDC / Standard Unit |
| Isochronous Operation Only | ESD2402-12 or -24 12 or 24 VDC / Light-Force (Low Current) |
| Adjustable PID Functions | * For Gaseous or Diesel Applications |

GOVERNORS 9

- Adjustable PID Functions
- Frequency Trim Input

 Product No.
 Description

 ESD2110
 Multi VDC / Standard Unit

· SSS2828288

Analog

ESD5100 Series

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|----------|-----------------------------|-------|
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| 0 | | |

- Isochronous, Variable, and Droop
- **Adjustable PID Functions**
- Speed Trim Input & Idle Control
- Auxiliary Input / +10V Supply

CE Approved

| Product No. | Description | |
|-------------|--|--|
| ESD5111 | Multi VDC / Standard Unit | |
| ESD5111T | Multi VDC / Temperature Compensated | |
| ESD5119 | Multi VDC / Cummins EFC Reverse Acting | |
| ESD5120 | Multi VDC / Light-Force (Low Current) | |
| ESD5131 | Multi VDC / Selectable Soft Coupling and Lead Circuit | |
| ESD5160 | Multi VDC / Expanded Frequency Range 10.5kHz / EFC Reverse Acting / Designed For Fire Pumps | |

ESD5221

| Conserved Locks | 1011 0110 |
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- Isochronous, Variable, & Droop
- **Adjustable PID Functions**
- Speed Trim & Idle Control
- Lead Circuit
- Auxiliary Input / +10V Supply

CE Approved

| Product No. | Description | |
|-------------|---|--|
| ESD5221 | Multi VDC / Single Element Speed Switch - Overspeed | |

ESD5300 Series

| | Isochronous, Variable, & Droop Adjustable PID Functions Dual Gain (Idle, Rated) Speed Trim & Idle Control Starting Fuel & Speed Ramping Overspeed & Crank Switches Soft Coupling & Lead Circuit Auxiliary Input / +10V Supply | |
|-------------|--|--|
| Product No. | Description | |
| ESD5330 | 24 VDC / Standard Unit | |

| ESD5340 | 24 VDC / Full-Fuel Starting Aid | |
|---------|---------------------------------|--|
| ESD5330 | 24 VDC / Standard Unit | |

* Ideal for ACB2001 Actuator

ESD5500E Series

ABCDEFGHJKLMNP

- Isochronous, Variable, & Droop
- Speed Ramping & Starting Fuel
- Soft Coupling & Lead Circuit
- Adjustable Idle Control
- Auxiliary Input / +10V Supply
- **CE** Approved

| Product No. | Description | |
|-------------|---|--|
| ESD5500E | Multi VDC / Standard Unit | |
| ESD5520E | Multi VDC / Light-Force (Low Current) | |
| ESD5522E | Multi VDC / Light-Force (Low Current) / Enhanced Droop / Smoke Limiting / Suitable For Cummins EFC Forward Acting (Normally Closed) | |
| ESD5526E | Multi VDC / Light-Force (Low Current) / Anti Wind-Up Circuit NOTE: For use with Small Bore T1 & T2 ATB Gaseous Applications | |
| ESD5528E | Multi VDC / Anti Wind-Up Circuit / NOTE: For use with Large Bore T3 & T4 ATB Gaseous Applications | |

ESD5550/5570 Series



- ۲ Isochronous, Variable, & Droop
- **Built-In Speed Switch Overspeed**
 - Speed Ramping & Starting Fuel
 - Soft Coupling & Lead Circuit
 - Auxiliary Input / +10V Supply
 - **CE** Approved

| Product No. | Description | |
|-------------|---|--|
| ESD5550 | Multi VDC / Standard Unit | |
| ESD5550M | Multi VDC / Expanded Gain & Stability Range (Replace Ghana Controls) | |
| ESD5570 | Multi VDC / Light-Force (Low Current) | |

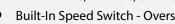
SSW Series



- **Multi VDC Operation**
- **Tachometer Output**
- **Overspeed Test Function**
- Indicator LEDs

| Product No. | Description | |
|-------------|---|--|
| SSW674 | One Element Speed Switch (Overspeed) | |
| SSW675 | Two Element Speed Switch (Overspeed/Crank) | |
| SSW676 | Three Element Speed Switch (Overspeed/Crank/Parallel) | |
| | · · · · · | |

GOVERNORS 10



ACCESSORIES - GOVERNORS - ANALOG

| Modules | | |
|--|---|--------|
| | DFM100 | DDM101 |
| RSC671 | | |
| Product No. | Descript | tion |
| RSC671 | Speed Ramp Controller - Ramp Up / Down with Speed Range / Variable Control | |
| RSC672 | Speed Ramp Controller - Ramp Up / Down Generator Set Applications | |
| DDM101 | Dual Driver Module - Drives 2 Actuators Simultaneously (Gaseous or Diesel) | |
| DFM100, Dual Fuel Module - Contact GAC | | |

Potentiometers

|--|

| | Product No. | Description |
|---|-------------|--|
| | TP501 | 1 Turn - 5K Ω with Knob |
| | TP502 | 10 Turn - 5KΩ with Knob |
| | TP503 | 10 Turn - 5K Ω with Locking Shaft |
| TP504 1Turn - 20KΩ with Knob / Droo | | 1Turn - 20K Ω with Knob / Droop Control |
| TP508 10 Turn - 20KΩ with Locking Shaft | | 10 Turn - 20K Ω with Locking Shaft |
| TP509 10 Turn - 20KΩ with Knob | | 10 Turn - 20KΩ with Knob |
| | TP510 | 10 Turn - 1KΩ |
| | TP511 | 10 Turn - 10ΚΩ |
| | TP521 | 10 Turn - 1KΩ with Multiple Variable Speed Control / Vernier Dial |



Magnetic Speed Pickups



| | Part. No. | Thread Length | Harness Length | Connector | with Mating Connector | Resistance |
|------------------|-----------|----------------|------------------------------|----------------------------------|--------------------------|---------------------------|
| | MSP6729 | 2.7in [69mm] | 6.0ft [1.8m] Shielded Cable | Flying Leads | No | 550-960Ω |
| | MSP6730 | 1.7in [43mm] | 6.0ft [1.8m] Shielded Cable | Flying Leads | No | 550-960Ω |
| 3/8 - 24 | MSP6731 | 4.0in [102mm] | 6.0ft [1.8m] Shielded Cable | Flying Leads | No | 550-960Ω |
| UNF Threaded | MSP6737 | 2.7in [69mm] | 6.0in [152mm] Shielded Cable | Push-On Terminals | No | 550-960Ω |
| medded | MSP6740 | 1.7in [43mm] | 6.0ft [1.8m] Shielded Cable | Packard Connector | No | 550-960Ω |
| | MSP6742 | 2.7in [69mm] | 1.0ft [0.3m] Shielded Cable | Flying Leads | No | 550-960Ω |
| | MSP674 | 3.00in [76mm] | Integrated | MIL Connector | No | High Output 913 Ω |
| | MSP675 | 3.19in [81mm] | 7.0in [178mm] | Flying Leads | No | 144-250Ω |
| | MSP676 | 5.00in [127mm] | 12.0in [305mm] | Flying Leads | No | 144-250Ω |
| | MSP677 | 3.00in [76mm] | Integrated | MIL Connector | No | 144-250Ω |
| | MSP678 | 4.86in [123mm] | Integrated | MIL Connector | No | 144-250Ω |
| - | MSP679 | 3.00in [76mm] | Integrated | MIL Connector | Yes | 144-250Ω |
| | MSP6710 | 4.86in [123mm] | Integrated | MIL Connector | Yes | 144-250Ω |
| 5/8 - 18 | MSP6719 | 2.37in [60mm] | 1.0ft [0.3m] | Flying Leads | No | 144-250Ω |
| UNF | MSP6720 | 3.86in [98mm] | 1.0ft [0.3m] | Flying Leads | No | 144-250Ω |
| Threaded | MSP6721 | 3.19in [81mm] | 2.75in [70mm] | Automotive Connector | No | 144-250Ω |
| | MSP6721C | 3.19in [81mm] | 2.75in [70mm] | Automotive Connector | Yes | 144-250Ω |
| - | MSP6722 | 2.37in [60mm] | 6.00in [152mm] | Push-On Terminals | No | 144-250Ω |
| | MSP6728 | 3.19in [81mm] | 6.25in [159mm] | Packard Connector | No | 144-250Ω |
| | MSP6728C | 3.19in [81mm] | 6.25in [159mm] | Packard Connector | Yes | 144-250Ω |
| | MSP6732 | 3.16in [80mm] | 3.25in [83mm] | Dual Packard Connector | No | 144-250Ω |
| | MSP6732C | 3.16in [80mm] | 3.25in [83mm] | Dual Packard Connector | Yes | 144-250Ω |
| | MSP6743 | 3.50in [89mm] | Integrated | #8-32NC-2A Stud Terminals | No | High Output 1.2kΩ |
| | MSP6724 | 3.45in [88mm] | 3.00in [76mm] | Automotive Connector | No | 144-250Ω |
| | MSP6724C | 3.45in [88mm] | 3.00in [76mm] | Automotive Connector | Yes | 144-250Ω |
| 3/4 - 16 | MSP6734 | 3.45in [88mm] | 4.25in [108mm] | Flying Leads | No | 144-250Ω |
| UNF Threaded | MSP6735 | 3.45in [88mm] | 3.00in [76mm] | Packard Connector | No | 180Ω |
| Inclucia | MSP6744 | 2.30in [58mm] | Integrated | #8-32NC-2A Stud Terminals | No | High Output 1.2k Ω |
| | MSP6751 | 5.0in [127mm] | Integrated | #8-32NC-2A Stud Terminals | No | High Output 1.3kΩ |
| | MSP6714 | 3.00in [76mm] | Integrated | MIL Connector | No | 144-250Ω |
| | MSP6715 | 3.00in [76mm] | Integrated | MIL Connector | Yes | 144-250Ω |
| M16 x 1.5 | MSP6723 | 3.13in [79mm] | 3.00in [76mm] | Automotive Connector | No | 144-250Ω |
| UNF Threaded | MSP6723C | 3.13in [79mm] | 3.00in [76mm] | Automotive Connector | Yes | 144-250Ω |
| medded | MSP6739 | 3.13in [79mm] | 3.00in [76mm] | Packard Connector | No | 144-250Ω |
| | MSP6745 | 5.00in [127mm] | Integrated | MIL Connector | No | 144-250Ω |
| M18 x 1.5 UNF | MSP6741 | 2.29in [58mm] | 9.00in [228mm] | Metri-Pack 150 Series (Unsealed) | No | N/A |
| Threaded | MSP6746 | 2.70in [69mm] | 18.00in [0.46m] | Automotive Connector | No | N/A |

ACCESSORIES - MAGNETIC SPEED PICKUPS

Cable Harnesses

| | Product No. | Description |
|--|-------------|---|
| | CH1204 | MSP Military-Style (Amphenol) Sensors - 10 ft. [3m] Shielded Harness / Straight Connector EC1100 / 2-Terminal |
| | CH1205 | MSP Military-Style (Amphenol) Sensors - 10 ft. [3m] Shielded Harness / 90° Connector EC1110 / 2-Terminal |
| | CH1206 | MSP Automotive Sensors - 4 ft. [1.2m] Unshielded Cable / 2-Terminal |
| | CH1207 | MSP Automotive Sensors - 10 ft. [3m] Shielded Cable / 2-Terminal |
| | CH1211 | MSP Military-Style (Amphenol) Sensors - 27 ft. [8.2m] Shielded Harness / Straight Connector EC1100 / 2-Terminal |
| | CH1219 | MSP Packard Sensors - 10 ft. [3m] Shielded Harness / 2-Terminal |
| | CH1235 | MSP Military-Style (Amphenol) Sensors - 13 ft. [4m] Shielded Harness / Straight Connector EC1100 / 2-Terminal |

Mating Connectors

| | Product No. | Description |
|---|-------------|---|
| Contraction of the second | EC1100 | MSP Military-Style (Amphenol) Sensor - Mating Connector Kit / With Straight Cable Clamp & Weather Boot / 2-Terminal |
| EC1110 MSP Military-Style (Amphenol) Sensor - Mating Cor Weather Boot / 2-Terminal | | MSP Military-Style (Amphenol) Sensor - Mating Connector Kit / With 90° Cable Clamp & Weather Boot / 2-Terminal |
| EC1350MSP Packard Sensors - Mating Connector Kit / 2-TerminalEC1360MSP Packard Sensors - Connector Kit Replacement / 2-TerminalEC1518MSP6741 - Mating Connector Kit / 2-Terminal / Metri-Pack 150 Series (Unsealed) | | MSP Packard Sensors - Mating Connector Kit / 2-Terminal |
| | | MSP Packard Sensors - Connector Kit Replacement / 2-Terminal |
| | | MSP6741 - Mating Connector Kit / 2-Terminal / Metri-Pack 150 Series (Unsealed) |

Generator Accessories

Load Anticipation, Sharing, and Synchronizing







All Electric Sensing •

- Accurately Measures True Power
- Load Anticipation and Droop Adjustment
- Isochronous Load Sharing

LSM672

| | | LS |
|--|--|----|
| | | |

| Product No. | Description | | |
|--|--|--|--|
| LAM100 | Load Anticipation Module / Hard Potted / Measures Generator Line Current Through CT and Signals Speed Control to Compensate / Adjustable Time Constant & Amplitude | | |
| LSM100 10 VDC (From Speed Control) / Isochronous Load Sharing / Load Anticipation / Droop | | | |
| LSM201 (CE) 24 VDC / Isochronous Load Sharing / Load Anticipation / Power Monitors Adjustment Control / Power Ramping and Control / Dre / Forward and Reverse Power Monitoring and Reset Capability | | | |
| LSM201N 24 VDC / Isochronous Load Sharing / Load Anticipation / Power Monitors Adjustment Control / Power Ramping and Control / Dro Forward and Reverse Power Monitoring and Reset Capability | | | |
| LSM672 (CE) 24 VDC / Isochronous Load Sharing / Forward and Reverse Power Monitoring and Reset Capability / Load Anticipation / Dr | | | |
| LSM672N 24 VDC / Isochronous Load Sharing / Forward and Reverse Power Monitoring and Reset Capability / Load Anticipation / Droc | | | |
| SYC6714 Multi VDC / Automatic Synchronizer With Sync Check Relay | | | |



Interface Modules





EAM108



EAM103

EAM131

| Module | | Description | Interfaces Non GAC Product | To GAC Product |
|-----------|---|--|---|-----------------|
| EAM100 | 24 VDC | 5kΩ Trim Pot Input | Cummins EFC Speed Control | LSM / SYC |
| EAM101 | 24 VDC | 5k Ω Trim Pot Input / Selectable 50/60Hz Operation | Barber Colman - Dyna 1 & 800 Speed Control | LSM / SYC |
| EAM103 | 24 VDC | Supplies the BC Dyna2 Load Sharing with +4 & +8VDC / Output of Dyna 2 is Amplified, Conditioned, and Level Shifted to Match Speed Controller Input | Barber Colman - Dyna 2 Load Sharing (80100, 80101, 80104, 80105) | ESD |
| EAM104 | 24 VDC | 5V ±5VDC Input / 2.5V Nominal Output | Detroit Diesel DDEC 3 Controller | LSM / SYC |
| EAM105 | 24 VDC | 5V ±5VDC Input / 0V ±5VDC Output From GAC LSM/SYC | Heinzmann EG or KG6-04/10-04 Speed Control | LSM / SYC |
| EAM108 | 24 VDC | Accepts Nominal 5V Input / 1.5VDC Output to 8290 Controller | Woodward (8290-038) Speed Control | LSM / SYC |
| EAM110 | Multi VDC | Nominal 5V Input / 5V Output Based on Cummins QST Internal 5V Reference | Cummins QST30 & QSK45-78 | LSM / SYC |
| EAM111 | Multi VDC | Multi VDC 0-10V Speed Range Input / 5V Narrow Trim Input / MTU M-DEC MTU M-DEC | | LSM / SYC |
| EAM113 | Multi VDC | 4 - 20mA / 5V Input / PWM Output | CAT HUEI System | |
| EAM115 | Multi VDC | Iti VDC 5V Input / 2.5V Output Based on Perkins 5V Reference Signal Perkins 1306-E87 7M351 | | LSM / SYC |
| EAM116 | Multi VDC Universal - Galvanic Isolation / 1x 0-5 VDC, 1x 0-10 VDC, 1x 4-20mA Input / 0-5 VDC Output Universal | | ESD / EDG / EEG | |
| EAM120-24 | 24 VDC | 5V ±5 VDC Input / 0VDC ±5 VDC Output | Woodward 2301A | LSM / SYC |
| EAM121-24 | 24 VDC | 0 ± 3 VDC Input / Nominal 5V Output | Woodward Load Sharing & Synchronizing | ESD |
| EAM122-24 | 24 VDC | Nominal 2.875 VDC Input / 5V Input / 2.9V Output | Volvo EMS I & II EFI Control | LSM / SYC |
| EAM125 | 24 VDC | 1-4 VDC Input / 4-20mA Output | Universal | Feedback Sensor |
| EAM127-24 | 24 VDC | Nominal 5 VDC Input / 1.6 VDC Output | Interface Module Scania S6 (EMS) EFI SY | LSM / SYC |
| EAM131 | 24 VDC | Universal / 4-20mA Input / 0-5VDC Output / Reverse Polarity | n/a | ESD / EDG / EEG |
| EAM208 | 24 VDC | Variable Speed DC Generator Control / Integrated Current Transformer / 200A Input / 0-8 VDC Output / Built-In Power Meter Output | n/a | ESD / EDG / EEG |
| EAM210 | 24 VDC | Universal / 4-20mA or 0-5VDC Load Sharing Input / 100% Max Duty Cycle Output | Caterpillar & Cummins | n/a |

Voltage Regulators



- Regulation Accuracy $\pm 0.5\%$ Steady State
- Low Voltage Build-Up, 6VAC
- Over Voltage and Internal Fuse Protection

| - (| EVR | 63. | _/1 |
|-----|---------|-----|-----|
| | _ V I I | 0.0 | -+1 |

| Product No. | Description |
|-------------|--|
| CVR63-4R | Commercial Voltage Regulator / 4A 63V Field / Rear Facing Pots / Replaces Basler AVC63-4D & BE350, McPherson SS350, and Marathon SE350 |
| CVR63-6 | Commercial Voltage Regulator / 6A 63V Field |

J1939 Data Readers

GAC's low-cost JDR series of J1939 data readers allow users to monitor trouble codes and standard engine parameters. More advanced models support Tier IV engines with diesel particulate filters. Harsh applications are no match for JDR's rugged design. With installation and setup a breeze, users will be monitoring engine vital signs and configuring parameters in no-time.

| | FUEL |
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JDR050

Wide Temperature Range

Built-in CAN bus Termination

JDR050-IV

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JDR100-IV

JDR100

Self Contained, No Configuration Software Required

Customizable Overlay with OEM Logos

| Product No. | Description | |
|-------------|--|--|
| JDR050 | JDR050 J1939 Diagnostic Trouble Code Reader | |
| JDR050-IV | J1939 Diagnostic Trouble Code Reader / Tier IV DPF Regen Control Capability | |
| JDR100 | JDR100 J1939 Diagnostic Trouble Code Reader / 6 Live Engine Parameters | |
| JDR100-IV | J1939 Diagnostic Trouble Code Reader / 7 Live Engine Parameters / Tier IV DPF Regen Control Capability | |

ACCESSORIES





| Product No. | Description |
|-------------|--|
| CH417-4572 | 15' Cable Harness / Mating Connector / Built-in CAN bus Termination Jumper |
| EC1331 | Deutsch DT06-6S Mating Connector, Pins / Plugs for the JDR |

Cable Harness

Mating Connector

Fuel and Ignition Management System (FIMS)



The Air-Fuel Ratio (AFR) 200 Series and the Ignition Control Module (ICM) 200 Series controllers are part of GAC's comprehensive Fuel and Ignition Management System (FIMS) for gaseous-fueled, spark-ignited engines. The AFR200 performs closed-loop air-fuel ratio control using an exhaust oxygen sensor for feedback, in addition to providing a built-in engine speed governor with GAC's proprietary EDGe algorithm. Easy to configure, simple to install, and built for the extreme environments of industrial engines; GAC's AFR200 series delivers.

AFR200 Series



- Integrated Venturi Mixer / Fuel Control
- Built-in Engine Speed Governor for GAC ATBs or Actuators
- 3 Fixed Speeds, 1 Variable Speed, 1 Auxiliary Speed Trim
- Free GAC SmartVU Software, No Special Adapter Needed

INSTRUMENTATION 15

| Prod. No. | Description |
|-----------|--|
| AFR210 | One Oxygen Sensor Input and EGT (Type-K) Input |
| AFR211 | Two Oxygen Sensor Inputs (Pre and Post Catalyst) and EGT (Type-K) Input |

| AFR | 200 | Series | | | | | | | |
|---------------------------------|-------------------|--|-----------------------|-------------------|----------------------|--|---------------------------------------|---------------------|---------------------------------|
| Mixer & Fuel Co Valve Assemb | ontrol | Fuel Control | Shut-Off | Engine Me Sens | | Oxygen Sensors | Manifold Absolute Pressure Sensors | Gaseous Filters | Zero Pressure Gas Regulators |
| | | Valves | Solenoids | | | oxygen sensors | | Gaseous rinter | |
| | | | | Venturi | Mixers Only | | | | |
| MX24 | Vent | uri Mixer Assembly / 2.0 in. [| 51mm] Air Inlet Hos | e Fitting / 2 | 4mm [0.95 in] | Throat Diameter | / 5/8 in. [15.88mm] Fu | uel Inlet Hose Fitt | ing |
| MX32 | Vent | uri Mixer Assembly / 2.5 in. [| 63.5mm] Air Inlet H | ose Fitting / | 32mm [1.27 ir | n] Throat Diamete | er / 5/8 in. [15.88mm] | Fuel Inlet Hose F | itting |
| MX36 | Vent | uri Mixer Assembly / 3.0 in. [| 77mm] Air Inlet Hos | e Fitting / 3 | 6mm [1.42 in.] | Throat Diameter | / 3/4 in. [19.05mm] H | lose Fitting | |
| MX42 | Vent | uri Mixer Assembly / 3.0 in. [| 77mm] Air Inlet Hos | e Fitting / 4 | 2mm [1.65 in.] | Throat Diameter | / 3/4 in. [19.05mm] H | lose Fitting | |
| MX48 | Vent | uri Mixer Assembly / 3.5 in. [| 90mm] Air Inlet Hos | e Fitting / 4 | 8mm [1.89 in.] | Throat Diameter | / 1 in. [25.4mm] Hose | Fitting | |
| MX54 | Vent | uri Mixer Assembly / 3.5 in. [ˈ | 90mm] Air Inlet Hos | e Fitting / 5 | 4mm [2.14 in.] | Throat Diameter | / 1 in. [25.4mm] Hose | Fitting | |
| MX54-V | Vent | uri Mixer Assembly / 3.5 in. [ˈ | 90mm] Air Inlet Hos | e Fitting / 5 | 4mm [2.14 in.] | Throat Diameter | / 1 in. [25.4mm] Hose | e Fitting / Two Inl | ets |
| | | M | K_B-STM Series Ve | nturi Mixer | and Fuel Con | trol Valve Assen | nblies | | |
| MXSB## | -STM | Size 20 - 30, Small Bore, T1 | Bolt Pattern / MXSB | 20-STM, MX | SB22-STM, MX | SB24-STM, MXSE | 26-STM, MXSB28-STN | A, MXB30-STM | |
| MXMB## | ≠-STM | Size 40 - 50, Medium Bore, | T2 Bolt Pattern / MX | MB40-STM, | MXMB42-STM | , MXMB44-STM, | MXMB46-STM, MXMB | 48-STM, MXMB5 | 0-STM |
| MXLB## | -STM | Size 75 - 85, Large Bore, T3 | & T4 Bolt Pattern / I | MXLB75-STM | Л, MXLB85-STI | Л | | | |
| | | | | Fuel V | alve Only | | | | |
| VFC1 | 03 | Inline Stepper Fuel Control | Valve Assy - 5/8 in. | [15.88mm] l | - ittings / Use w | vith MX Series or | Aftermarket Mixers | | |
| VFC1 | 05 | Inline Stepper Fuel Control | Valve Assy - 3/4 in. | [19.05mm] l | - ittings / Use w | vith MX Series or | Aftermarket Mixers | | |
| VFC1 | 06 | Inline Stepper Fuel Control | Valve Assy - 1 in. [2 | 5.4mm] Fitti | ngs / Use with | MX Series or Afte | ermarket Mixers | | |
| | Shutoff Solenoids | | | | | | | | |
| SOS1 | 00 | 12 or 24 VDC/ 0.75 in [19.05mm] NPT Fittings / Direct Acting / Pres. Dif. 0-3 PSI (0-0.2 Bar) | | | | | | | |
| SOS1 | 01 | 12 or 24 VDC/ 1.0 in [25.4m | m] NPT Fittings / Pi | ot Operated | d / Pres. Dif01 | 5-3 PSI (0.001-0.2 | 2 Bar) | | |
| SOS1 | 02 | 12 or 24 VDC/ 1.0 in [25.4m | m] NPT Fittings / Di | rect Acting | / Pres. Dif. 0-0. | 75 PSI (0-0.05 Bar |) | | |
| SOS1 | 03 | 12 or 24 VDC/ 1.5 in [38.1m | m] NPT Fittings / Pi | lot Operated | d / Pres. Dif01 | 5-3 PSI (0.001-0.2 | 2 Bar) | | |
| | | Engine Moni | toring Sensors | | | Ma | nifold Absolute Pre | ssure Sensors | |
| SPO1 | 00 | Oil Pressure Sensor, 150 PS | , 2 Terminal, Ring P | osts | | SPM200-1B | MAP, 1-Bar | | |
| STC10 | 01 | Coolant Temperature Sense | or, 250°F, Spade Terr | ninals | | SPM201-2B | MAP, 2-Bar | | |
| STE10 | 01 | Exhaust Gas Temperature S | ensor, Type K Thern | nocouple wi | th Connectors | SPM202-3B | MAP, 3-Bar | | |
| | | Gaseous Filters | | | | Manifold Absol | ute Pressure Sensor | s | |
| GF60 | 66 | .75 in 15 PSI (1Bar) Max Inlet | Pressure | COV102 | 12/06 (1) | Per el Cr. 1 . L | | | Townsin al |
| GF60 | 88 | 1 in15 PSI (1Bar) Max Inlet Pr | essure | SOX102 | 12VDC / Nari | ow-Band Stoichi | ometric Operation / B | oulit-in Heater / 4 | Terminal |
| GF801 | 212 | 1.5 in 15 PSI (1Bar) Max Inlet | Pressure | | | DC / Narrow-Band Stoichiometric Operation / 2-Terminal | | | |
| KTGF | 60 | Replacement Filter & Hardv | vare / 6066 & 6088 | SOX103 | Multi-VDC / I | | | | |
| KTGF | 80 | Replacement Filter & Hardv | vare / 801212 | | | | | | |
| | | | Ze | ero Pressuro | e Gas Regulat | ors | | | |
| RPR1 | 02 | Maxitrol R500Z - 0.75 in. Fittings / Pi 0.5 PSI Max / Po -1.0 in. to 2.5 in. w.c. / Zero Governor | | | | | | | |
| RPR1 | 03 | Maxitrol R600Z - 1 in. Fittings / Pi 1.0 PSI Max / Po -1.0 in. to 1.5 in. w.c. / Zero Governor | | | | | | | |
| RPR1 | 04 | Maxitrol 210DZ - 1 in. Fittings / Pi 5.0 PSI Max / Po -1.0 in. to 1.5 in. w.c. / Zero Governor | | | | | | | |
| RPR1 | 05 | Maxitrol 210DZ - 1.5 in. Fittings / Pi 5.0 PSI Max / Po -1.0 in. to 1.5 in. w.c. / Zero Governor | | | | | | | |
| RPR21 | 0EZ | Maxitrol 210EZ - 1.5 in Fittings / Pi 5.0 PSI Max / Po -1.0 in. to 3.0 in. w.c. / Zero Governor | | | | | | | |
| RPR-RV | V61 | Maxitrol RV61 - 1 in Fittings / Pi 1.0 PSI Max / Po 1.0 in. to 3.0 in. w.c. / Straight-Thru-Flow | | | | | | | |
| RPR-R | V81 | 81 Maxitrol RV81 - 1.5 in Fittings / Pi 1.0 PSI Max / Po 3 .0 in. to 8.0 in. w.c. / Straight-Thru-Flow | | | | | | | |
| | | | | | | | | | |

GASEOUS FUELED SYSTEMS

AFR200 ACCESSORIES

| | AFR200 | Series Mating Connector Kits & Harnesses | | Оху | gen Sensor Mating Connector Kits | I |
|--|---------|--|--------|-------|---|--|
| | EC1501 | AFR200 Series, Connector 1, 35-Terminal (All) | EC1 | 508 | SOX102, 12V, 4-Terminal | 198 |
| | EC1502 | AFR200 Series, Connector 2,14-Terminal (201/211 Only) | EC1 | 520 | SOX103, 24V, 2-Terminal | |
| AFR Series Connector Kits & Harnesses | CH1519 | AFR200 Series, Harness Kit, 35-Terminal, Flying Leads (All) | Manifo | ld Ab | os. Pressure Sensor Mating Connector Kits | Oxygen Sensor Connector Kits |
| A | CH1520 | AFR200 Series, Harness Kit, 14-Terminal, | EC150 | 9 S | PM200-1B, Green, 3-Terminal | |
| | CITISZO | Flying Leads (201/211 Only) | EC151 | o s | PM201-2B, Orange, 3-Terminal | theme in the |
| | | | EC151 | 1 S | PM202-3B, Black, 3-Terminal | |
| 200. | MX S | eries Fuel Valve Mating Connector Kit | - | | | |
| Fuel Valve | EC1507 | MX Series Stepper Motor, 4-Terminal | | | | Absolute Pressure Sensor Connector Kits |
| Connector Kit | | | | | | |

Lean Burn for the AFR

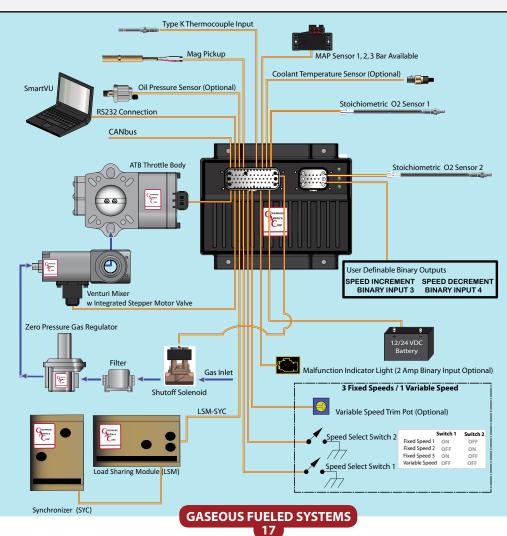
The GAC KT317WB-AFR, ready to use lean burn adapter kit for the FIMS500 AFR2XX Series controllers determines how rich or lean an engine is running at any load and compensates for changes in temperature and sensor condition. Performance and operational settings are adjusted and viewed in "real time" using GAC's SmartVU software.

- 12 or 24 VDC
- 0.8 to 1.5 λ Range



- Plug and Play Lean Burn Solution
- Wide Band Bosch LSU4.2 Sensor Included
- Accurate Wideband to Narrow Band Conversion

| KT317WB-AFR-12 or -24 | Lean Burn Adapter Kit Includes the Parts Below |
|-----------------------|---|
| EAM212 | Lean Burn Adapter |
| CH1523 | EAM212 Lean Burn Adapter Controller Harness |
| SOX104 | O2 Sensor Assembly, LSU4.2 |
| HW11-025 | Installation Spacer, Threaded, for SOX104 O2 Sensor Assembly |
| PCI106 | DC/DC Converter (24V Version Only) |



Fuel and Ignition Management System (FIMS)



Spark Plugs & Wires

Engine Position Sensors

P

Up to 8 Cylinders Sequential or 16 Cylinders Wasted Spark

- Supports Camshaft / Crankshaft Engine Position Sensors
- Fixed or Variable Timing or With In-Field Global Trim Capability
- Two Optional Variable Timing Maps

| | | Spark Plugs & Wires | | |
|-----------------------|------------|--|--|--|
| | SPG100-002 | Spark Plug / Turbocharged Lean Burn or Stoichiometric Applications | | |
| and the star | SPW100 | Single Ignition Wire Lead, High Performance | | |
| | | Timing Trigger Wheels | | |
| 7 | GR104 | 24-1, 68mm, Trigger Wheel | | |
| Service . | | Engine Position Sensors | | |
| Timing Trigger Wheels | SCI100 | Variable Reluctance / 90° Connector | | |
| | SCI101 | Variable Reluctance / Straight Connector | | |
| | SCI102 | Hall Effect / Pigtail Connector | | |
| | SCI103 | Hall Effect / 90° Connector | | |
| | | Ignition Coils | | |
| | CL600 | Single Output, Sequential Firing / 12 or 24V | | |
| | CL601 | Dual Output, Wasted-Spark Firing / 12 or 24V | | |
| Ignition Coils | CL602 | Single Output, Sequential Firing / 12V Only | | |
| y | CL603 | Dual Output, Wasted-Spark Firing / 12V Only | | |

ICM ACCESSORIES



| ICM200 Series Mating Connector Kit & Harnesses | | | | |
|--|--|--|--|--|
| EC1500 | ICM200 Series, 35-Terminal | | | |
| CH1521 | ICM200 Series, Harness Kit, 35-Terminal, Flying Leads | | | |

ICM200 Connector Kits & Harnesses



| Ignition Coil Mating Connector Kits | | | | |
|-------------------------------------|-------------------|--|--|--|
| EC1504 | CL602, 2-Terminal | | | |
| EC1517 | CL601, 3-Terminal | | | |
| | | | | |

| Engine Position Sensor Mating Connector Kits | | | |
|--|--------------------|--|--|
| EC1503 | SCI102, 3-Terminal | | |
| EC1504 | SCI100, 2-Terminal | | |
| EC1518 | SCI101, 2-Terminal | | |
| EC1519 | SCI103, 3-Terminal | | |



Engine Position Sensor Connector Kits

NOTE: Custom Ignition Coil Rails and Distributor Cap Drop-In Upgrades Available.

MISCELLANEOUS ACCESSORIES

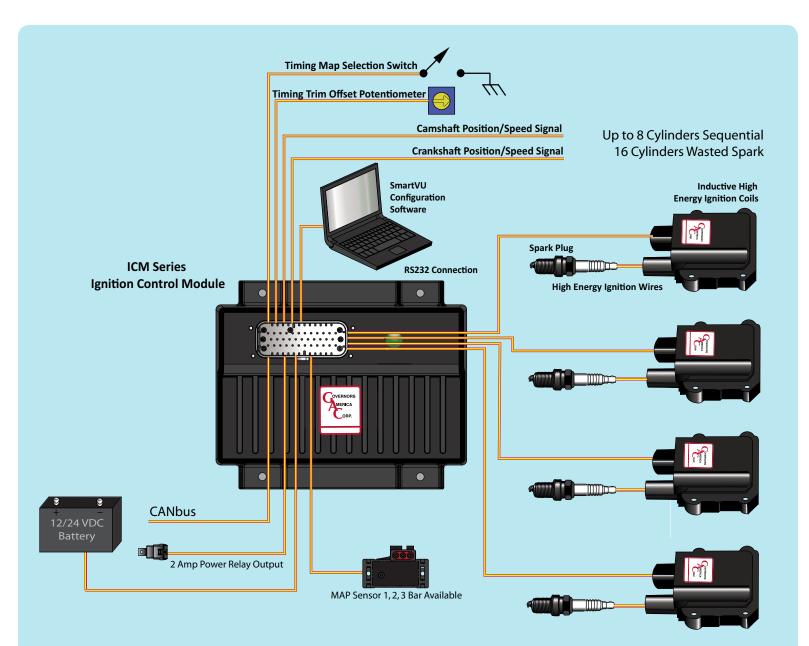


| | Power Relays | Mi | scellaneous Component Connector Kits |
|------------|--------------------|--------|--------------------------------------|
| RLY02-1009 | 12V, Normally Open | EC1505 | Fuse Holder, 2-Terminal |
| RLY02-1011 | 24V, Normally Open | EC1506 | Relay Holder, 5-Terminal |
| | | EC1516 | Serial Port DB9-F, 9-Terminal |



| Prod. No. | Description |
|-----------|---------------------------|
| ICM200-4 | 4 Output Channels Maximum |
| ICM200-6 | 6 Output Channels Maximum |
| ICM200-8 | 8 Output Channels Maximum |

GASEOUS FUELED SYSTEMS 18









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