

# EGC2 Modbus Registers

## 4x Input Registers

Register	Description
40012	O2 Process Variable (PV)
40013	O2 Average PV
40017	Stroke
40018	Position Demand
40019	Manifold Pressure
40020	Pressure Demand
40021	Actuator Output
40022	Ignition Confirm
40023	Actuator Power
40024	Sensor Ignore
40030	Position Proportional Contribution
40031	Position Integral Contribution
40032	Pressure Proportional Contribution
40033	Pressure Integral Contribution
40034	O2 Integral Contribution
40039	Warm-up Timer
40040	O2 Fail Timer
40041	Power Fail Timer
40042	Default Mode
40045	O2 Set-point selected
40046	Heater
40051	Start Timer
40052	Governor Output
40053	Speed Selected
40054	Speed Set-point
40055	Overspeed Flag
40056	Speed Integral Contribution
40057	Speed Proportional Contribution
40058	Idle Timer
40062	Module Status
40063	Free Air Cal
40066	Speed Derivative Contribution
40069	Engine Speed

# EGC2 Modbus Registers

## 401x Holding Registers

Register	Description
40112	Stroke Gain
40113	Stroke Offset
40114	O2 Set-point
40115	Demand Gain
40116	Demand Offset
40123	Default Pressure
40124	Position Proportional Gain
40125	Position Integral Gain
40126	Pressure Proportional Gain
40127	Pressure Integral Gain
40128	Load Gain Proportional
40129	Load Gain Integral
40130	O2 Integral Gain
40131	Actuator Offset
40132	Maximum Pressure
40133	Minimum Pressure
40134	Serial Number
40135	Modbus Address
40138	Calibrated
40140	Valve Type
40144	Save Data
40145	Warm-up Timer Start
40146	O2 Fail Timer Start
40147	Act Limit
40148	mA Min.
40149	mA Max.
40150	Sp Min.
40151	Sp Max.
40152	Sp Enable
40153	Zeroing
40154	O2 Sp used
40155	Speed Prop Gain Min
40156	Speed Prop Gain Max
40157	Speed Int Gain Min
40158	Speed Int Gain Max
40159	Transient reset
40160	Requested Speed
40161	Idle Delay
40162	Speed Offset
40163	Speed Gain
40164	Overspeed

# EGC2 Modbus Registers

## 401x Holding Registers

40165	Governor act. Offset
40166	Minimum Speed
40167	Maximum Speed
40168	Crank Speed
40169	Ramp Rate
40170	Idle Speed
40171	Gov Max
40172	Overshoot
40173	Undershoot
40174	Overshoot Gain
40175	Undershoot Gain
40176	Force O2 Sensor
40177	Force Heater
40178	Speed Derivative Gain Min.
40179	Speed Derivative Max.
40180	Force Governor
40181	Init Sensor Calibration
40182	Force Actuator

### Scaling:

To convert data from the valve, divide it by 1000.

To send data to the valve, first multiply

the actual setting by 1000, then write data to the Modbus register.

#### Example:

1. You read 500 from Modbus register 40123 (Default Pressure).

$$500/1000 = 0.5$$

Default Pressure equals 0.5 in. W.C.

2. You want to set Default Pressure to 4 in. W.C.

$$4 * 1000 = 4000$$

Write 4000 to Modbus register 40123.

### Communications Setup

EGC Valve Viewer A/F automatically establishes communications with EGC using default communications port COM1 and Device ID 1.

Default Communications Port Settings:

Bits per second - 9600

Data Bits - 8

Parity - None

Stop bits - 1

Flow Control - None