



**Reference Manual 26455**  
**12 Mar 2010**

**Woodward Customer Publications**  
**Cross-Reference**

## Woodward Customer Publications (by application)

This is a listing of all publications available to the general public ([www.woodward.com/publications](http://www.woodward.com/publications)), arranged by application (Diesel Engines, Gas Engines, Steam Turbines, Gas Turbines, Power Management, and General/Reference Publications). The listing includes product specifications, technical manuals, and application notes (as well as catalogs and brochures under General Information). A complete listing of all these publications can be found in index 26300.

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# Diesel Engine Controls

723 Product Line	Product Spec	Technical Manual	Application Note
723 Digital Controls		02758 (Digital Control Hardware) 02827 (Digital Marine Control) 37807 (Generator Control) 26097 (Position Control) 02785 (Analog Load Share) 02784 (DSL/Compatible-old) 02755 (723/QuadraLink)	02817 (Network Binding Procedure)
LinkNet Distributed I/O Network	85572	02826 (LinkNet Option for use with 723 Digital Controls)	

723PLUS/828 Product Line	Product Spec	Technical Manual	Application Note
723PLUS Digital Control, Standard Applications	03203	02882 (723PLUS 8280-410/411)	26031 (Network Binding Procedure/DOS)
723PLUS Digital Control, Custom Control	02876	02877 (723PLUS Digital Control Hardware)	51203 (Network Binding Proc./Windows)
723PLUS Performance Control for Compressor-Drive Engines	03214	02880 (723PLUS for Marine PGA Replacement 8280-419) 26549 (723PLUS for Marine PGA Replacement 8280-1129) 37827 (Generator Control) 26425 (723PLUS Nile River Vessel Generator Control 8301-1146) 26264 (723PLUS, Single Engine Marine Applications, DSL/Compatible Input 8280-1042) 02884 (723PLUS Performance Control 8280-424) 26043 (723PLUS Performance Control 8280-598) 26227 (723PLUS Digital Marine Control, Two Engine Mechanical Load Sharing) 02883 (723PLUS w/ Process Control 8280-464/465) 26141 (723PLUS/AILS) 02879 (723PLUS/Analog Load Sharing) 26373 (723PLUS/Cat ADEM 8280-1076) 02878 (723PLUS/DSL/Compatible) 02831 (723PLUS/DSL/MSL Gateway) 26471 (723PLUS/DSL/MSL Gateway/Brazil) 02881 (723PLUS/Mechanical Load Sharing) 26310 (723PLUS/Redundant Load Sharing 8280-1056) 26482 (723PLUS/2-Engine Redundant 8280-1109)	
828 Digital Control	02874	02875 (828 Digital Control Hardware)	

2300 Product Line	Product Spec	Technical Manual	Application Note
2300 Digital Load Sharing & Speed Control (hardware)	03318	26232	

<b>2301A Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
2301A Speed Control	82021	82020	
2301A with 4–20 mA Input	02301	02302	
2301A Load Sharing & Speed Control (9905 Series)	82390	82389 (9905/9907 Series) 26006 (9907 Series)	50533 (Wiring the 9905 Series)
2301A Load Sharing & Speed Control with Dual Dynamics	82047	82046	
2301A Load Sharing & Speed Control with Temp or Process Limiting	82387	82386 02303 (9900-430—433) 02008 (Reverse Acting Fuel Limiter 8272-789) 82348 (2301 & 2301A Controls, Preregulator)	51191 (Replacing Caterpillar 2301 Controls) 51005 (Retrofitting UG-8-Controlled Eng.) 51090 (Adapting for Torque Conv. Use) 51242 (2301A to 2301D Wiring Differences)

<b>2301D Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
2301D Digital Control	03204	26065	
2301D-EC Digital Control	03204	26247 (2301D/2301D-EC 8273-138/-139/-140/-141) 26288 (2301D/2301D-EC 8273-501/-503/-505/-507)	51263 (2301D/2301D-EC PN Differences)
2301D-JM/JH	03239	26138	
2301D Control View Standard/Professional	03232		

<b>AGLC Automatic Generator Loading Control</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
AGLC Automatic Generator Loading Control	82399	82394 (9905-063) 82004 (9905-096)	

<b>APECS Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
General		36586 (APECS Diagnostic Guide) 36718 (APECS Actuator Kit for Cummins C) 36588 (APECS Actuator Kit for Daihatsu) 36587 (APECS Actuator Kit for Kubota) 36530 (APECS DC10502 Lin. Act. for Cummins) 36550 (APECS Controllers for DYNA 2000 and 2500 Linear Actuators) 36561 (APECS 0250 Kit for Isuzu 4BG1-TRV) 36562 (APECS 0250 Kit for Isuzu 4JG1-TPV) SE-4049 (APECS 3000) 36716 (APECS 3000 Installation) SE-4050 (APECS 4000) 36752 (APECS 4500) SE-4096 (APECS 5000) 36532 (APECS 70025 Actuator for Stanadyne) 36528 (APECS DYN3-60030 Electronic Speed Switch) 36538 (APECS DYN1-1075X Ctrl's for DYNA 2000 and 2500 Linear Actuators) SE-4051 (APECS EPS 1000 Equipment Protection System) 36555 (APECS ESSE-1 Electronic Speed Switch) 36564 (APECS ESSE-2 Electronic Speed Switch)	36579 (Controllers for Stanadyne Pumps) 36728 (Repl. of Power Flow Throttles) 51319 (Centralized Suppression for DPG) 51343 (APECS 4500 Firmware Release)

		36545 (APECS MCFA Laptop Diagnostic Monitor)
		36529 (APECS Plus 1, Plus 2, Plus 4, Plus 6 Digital Governor Systems)
		SE-4054 (APECS/EPS CD-ROM Installation Guide)
0200 Integral Actuators	36582	
0225 Linear Actuators	36581	
0225 Linear Actuator w/ Boot & Clevis Plunger	36730	
0275 Linear Actuators	36578	
500 Single Speed Electronic Engine Controller	36710	36725 (Quick Installation Guide) 36513 (User Manual)
2000/2500 Linear Actuators	03324	36531 (APECS 2500)
4500CAN Controller	36549	
4800 Control System	36717	
7000 Rotary Actuator	36501	
DPG-21XX-00X Digital Controllers	36502	36526 (APECS DPG-21XX-00X) 36543 (APECS DPG-2104) 36536 (APECS DPG-2111-001) 36537 (APECS DPG-2133-00X)
DPG-2201-00X Digital Controllers	36503	36523
DPG-2223-00X Digital Controllers	36554	36522
DPG-23XX-00X Digital Controllers	36504	36527
DPG-2401-00X Digital Controllers for EFC Valves	36512	36525
DPG Series Controllers, DPG Calibration Kit	36560	

<b>Atlas Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Atlas-II Turbine and Engine Control Platform	03346	26415	
AtlasSC Engine and Turbine Control System	03253	26179 (AtlasSC) 26229 (AtlasSC Overspeed Protection System)	

<b>Diesel Fuel Injection Systems</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
		55151 (Fuel Injection Equipment Introduction)	55142 (Fuel Pump Supersession List)
		55152 (Practical Aspects of Fuel Injection Equip.)	55143 (Diesel Engine Application List)
			01539 (Equipment Safe Handling & Use)

<b>Digital Reference Units</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Digital Reference Unit	03218	82343 (8271-221) 82442 (8271-651) 82006 (8272-682-685) 82324 (9900-352)	

<b>EGCP Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
EGCP-2 Engine Generator Control Package	03219	26175 (EGCP-2 Application 8406-120/121) 26181 (EGCP-2 Communications 8406-120/121) 26174 (EGCP-2 8406-120/121) 26076 (EGCP-2 Installation(8406-115/116) 26086 (EGCP-2 Operation 8406-115/116) 26099 (EGCP-2 HMI & Servlink 8406-115/116)	51199 (EGCP-2 Differences) 51201 (Setpoint Worksheet) 51244 (SW Upgr. Instr. to 8406-120E/-121F) 51270 (SW Up In to 8406-120G/121H/123C) 51209 (SW Upgr. Kit Instr. Rev A to B) 51211 (SW Upgr. Kit Instr. Rev A/B to C)

		37407 (EGCP-2/GCP-30 Load Share Interface Module)	
EGCP-3 LS Multi-unit Load Share Version	03300	26122 (EGCP-3 Installation) 26194 (EGCP-3 LS Operation)	51281 (8406-113 Rev K SW Changes) 51294 (8406-113 Rev L SW Changes) 51313 (8406-113 Rev N SW Changes) 51361 (8406-113 Rev R SW Changes) 51247 (Single Phase Zig Zag Application)
Misc. EGCP-3			51215 (Operation with Auto. Transfer Switch) 51207 (Sequencing) 51224 (Complex Power Systems Solutions) 51210 (Beta Site, São Paulo, Brazil) 51213 (EGCP-3 & SPM-D on the Sea Jewel)

**Electronic Fuel Injection Products**

	Product Spec	Technical Manual	Application Note
ECM3 Electronic Fuel Injection Control		26348	51338 (Casting Color)
In-Pulse II Fuel Injection Control	03315		

**Governors/Actuators**

	Product Spec	Technical Manual	Application Note
3161 Governor	03102	03101 (3161 Governor) 03110 (Solid Piston Air Pressure Fuel Limiter) 03107 ( Speed Adj Motor w/ Manual Speed Adjust) 03108 (Air Pressure Fuel Limiter) 03105 (Electric Shutdown Device) 03109 (Load Limit Control) 03103 (Manual Shutdown Device) 03106 (Pneumatic Speed Setting Device) 03104 (Pressure Shutdown Device) 03112 (Solenoid Start Fuel Limiter) 03111 (Torque Rise) 03113 (EGB Supplement to 3161 Governor) 54110 (3161/EGB Governor/Actuator Installation)	
CSC Cummins Speed Control	04181		
EG-3P/6P/10P Actuator	82516	37710 (EG-3C & EGR) 82560 (EG-3P) 82566 (EG-6P/10P) 54005 (EG-3P on DDAD V-149 Engine 8956-142) 54008 (EG-3P on Detroit Diesel I-71 Engine 8956-166) 54003 (EG-3P on DDAD V-71 & V-92 Engines 8956-143) 37714 (EG Power Transfer Control)	
EGB-1P/2P Governor/Actuator	82575	82570 54007 (EGB-2P on DDAD V-71 & V-92 Engines 8956-163) 54009 (EGB-2P on DDAD I-71 Engine 8956-162) 54006 (EGB-2P on DDAD V-149 Engine 8956-165)	
EGB-10P/13P/35P Governor/Actuator	82543	82340 (EGB-10P/13P/22P/29P/35P/58P)	
EGB-29P/58P Governor/Actuator	82483	82340 (EGB-10P/13P/22P/29P/35P/58P)	
EGB-200P/300P Governor/Actuator	82473	82462	
EGB Governor Mode Switch Assembly	82489		

Other EGBs		37709 (EGB-2C) 37729 (EGB-10, Two-Solenoid Spd Setting Mechanism) 37741 (EGB-10 Pneumatic Speed Setting, New Style) 37708 (EGB-10C) 54066 (EGB-10C/13C/35C/50C Instal) 82558 (EGB-10PLS Hydraulic Actuator) 37712 (EGB-35/50 Hydraulic Actuators) 37740 (EGB-500P)	
EPG Electrically Powered Governors	04106	82327 (512/24 & 1712/24, Single Phase Droop) 82329 (512/524 & 1712/1724 installation) 82493 (512/524 & 1712/1724 Isochronous) 82448 (501/1701) 82042 (4024) 82354 (EPG with Position Feedback) 82038 (Min/Max Control System)	50530 (Installation & Control Choices for) 50528 (Linking to a Mech Droop Gov)
EPG Installation Kits		54120 (1712/24,512/24 Kit 8923-009,8924-595/867/877: Bosch Pump) 54116 (1712/24 Kit 8924-584/591/862/868: Detroit Diesel I-71 Engine) 54086 (1712/24 Kit 8924-600: Caterpillar D3406 Engine) 54087 (1712/24 Kit 8924-601: Caterpillar D3304 & D3306 Engine) 54088 (1712/24 Kit 8924-604: Cummins N/NT/NTA-885 Engine) 54089 (1712/24 Kit 8924-605: Cummins KT/KTA-1150GS Engine) 54090 (1712/24 Kit 8924-606: Cummins V1710 Engine) 54050 (1712/24 Kit 8924-606: Cummins VT/VTA-1710 GS) 54091 (1712/24 Kit 8924-607: Cummins KT/KTA-2300GS/3067GS Engine) 54092 (1712/24 Kit 8924-608: Caterpillar 3208 Engine) 54063 (1712/24 Kit 8924-612: Deere 6466A Engine) 54099 (1712/24 Kit 8924-640: Deutz 6L 9131C Engine) 54101 (1712/24 Kit 8924-642: Caterpillar D3306B Engine) 54047 (1712/24 Kit 8924-655: White D 4800 Engine Gen Set) 54100 (1712/24 Kit 8924-782: Caterpillar D3406B Engine) 54115 (1712/24 Kit 8924-826: Caterpillar 3114T/3116T Engine w/ turbo, rdtr, fan dr) 04101 (4024 Kit 8923-071: Detroit Diesel V-149 Engine) 54117 (1724 Kit 8924-863: Detroit Diesel V71 or V92 Engines)	
EM-70/EM-140 Rotary Output Electric Actuators	40180	40178 (EM-140)	
EM-80 and EM-300 Actuators	36199	36173	
Other EM Actuators		04110 (EM-6 Actuator) 82000 (EM-10P/20P Actuators. all elec w/ electronic driver) 40152 (EM-35 Analog Driver) 40161 (EM-35 Digital Driver with Dual Feedback)	
EML-100 Actuator	40186	40183 (EML-100 Actuator) 26159 (EM/LQ Digital Driver)	
F-Series Modular Actuator	03345	26355	
PG Governors/General	36010	36652 (PG Automatic Safety Shutdowns & Alarms) 36646 (PG Auxiliary Compatible Torque Limiter) 36693 (PG Base Assemblies) 54056 (PG Dial & Lever Governor Installation) 36623 (PG Dial Governor, Back Pressure Controller) 36622 (PG Dial Governor, Speed Droop Linkage Mechanism)	

		36404 (PG Governing Troubles, Analysis & Correction of)
		36601 (PG Governor, Absolute Manifold Pres Bias Load Cntr & Fuel Limit)
		36600 (PG Governor Basic Elements)
		36614 (PG Governor Dial Type Speed Setting)
		36615 (PG Governor Lever Type Speed Setting)
		36014 (PG Governor Speed Adjusting Motor)
		36621 (PG Governor Speed Droop Linkage)
		36670 (PG Governor w/ Proportional Pneumatic Output Signal)
		36644 (PG Governor, Motor Speed Setting)
		36036 (PG Governor, Starting Fuel Limiter)
		36608 (PG Governor, Transducer Type Load Control/LVDT)
		36602 (PG Governor w/ Differential Servomotor, Basic Elements)
		36631 (PG Governor w/ Trque Adv at Idle, Man Press Bias Ld Cntrl & Fuel Lim)
		36630 (PG Governors, Basic Load Control System)
		36642 (PG Governors, Dynamic Brake Control)
		36691 (PG Governors, Electronic Speed Setting/PG-TR)
		36640 (PG Governors, Extensible Tailrod)
		36405 (PG Governors, Special Tools)
		36607 (PG Governors, Two-Slope Load Control)
		36695 (PG Manifold Air Pressure Bias Fuel Limiter)
		36661 (PG Manifold Gauge Pressure Fuel Limiter)
		36697 (PG Manual Reset Device for De-Energized-to-Shutdown)
		36605 (PG Overspeed Trip Test Device)
		36692 (PG Power Cylinder Assemblies)
		36680 (PG Preloaded Buffer Springs)
		36651 (PG Pressure Actuated Shutdown Assembly)
		36053 (PG Rail Enhancement Kit 8956-501)
		36685 (PG Shutdown Solenoid Dial & Lever)
		36660 (PG Speed Setting Fuel Limiter)
		36662 (PG Torque Limit Control with Speed Droop)
PG-12R/PG-12L Actuator		37517
PG-200/300 Governor	36619	36618 (Case, Accumulator, & Power Cylinder) 36054 (Dual Buffer System)
PG-500 Governor	36634	36633 (Case, Accumulator, & Power Cylinder) 36054 (Dual Buffer System)
PGA Governor	36701	36604 54054 (Installation) 36606 (8554-255 supplement to 36604) 36643 (Lever Speed Setting) 36679 (Pneumatic Load Balance System) 36686 (Pneumatic Load Balance System) 36702 (Weatherproofing Kit) 36650 (Solenoid Operated Shutdown Assembly) 36636 (PGA-58 & 200/300 Vibration Resistant Governor) 36629 (PGA-TL Governor 8558-657)
PGA-EG Governor/Actuator	36638	54069 (PGA-EG, PGG-EG, PGM-EG 12/29/58 Installation) 54065 (PGA-EG, PGG-EG, PGM-EG, 200/300/500 Installation)

PG-EG Actuator	03381	36637	
PGG Governor	36626	36627	
PGG-EG Governor/Actuator	36635	54069 (PGA-EG, PGG-EG, PGM-EG 12/29/58 Installation) 54065 (PGA-EG, PGG-EG, PGM-EG, 200/300/500 Installation)	
PG-PL Governor	36700	36694 54052 (Installation) 36702 (Weatherproofing Kit) 36650 (Solenoid Operated Shutdown Assembly)	
Other PG Governors/Actuators		36603 (PG-35 & PG-50 Governors) 36653 (PGD/PGL Governors, Pressure Actuated Shutdown) 54053 (PGE & PGEV Locomotive Governor Installation) 36703 (PGE & PGEV Locomotive Governors) 36628 (PGEV Governor 8573-463/494, 8570-687, 8559-910) 82328 (PGTM-200 Actuator) 36696 (PG-TR Electronic Speed Setting 8272-639)	
ProAct I/II Actuator	04122	04121 (ProAct I/II) 04176 (ProAct II Actuator and Driver) 36060 (ProAct II Technical Supplement)	51317 (Start-up Fuel Limiting add. to 04121)
ProAct III/IV Actuator	04126	04127	
ProAct V Actuator		04193	
ProAct Analog and Digital Plus	03231	26112 (ProAct Digital Plus) 26147 (ProAct Analog Actuator with Integral Driver)	
ProAct ISC (Integrated Speed Control)	03326	26246	51325 (5418-2949 Firmware Release)
ProAct ITB Integrated Actuator and Throttle Body for Large Bores	03305	26112 (ProAct Digital Plus) 26147 (ProAct Analog Actuator with Integral Driver) 26168 (ProAct ITB (Digital Plus) 105/120/135) 04166 (ProAct ITB Integrated Throttle Body and Actuator for large bores)	
Other ProAct		26265 (ProAct Actuator with Integrated Speed Control and Throttle Body) 04177 (ProAct mA Digital Speed Control) 36091 (Tandem ProAct Technical Supplement)	
PSG Governor	37010	54055 (Installation) 37013 (Aluminum Case) 37017 (Cast Iron Case) 03026 (Synchronizing Motor)	50516 (Governor Linkage)
PSG Governor, PM Speed Adjusting Motor	37014	04018 (SG/PSG Spd Adj. Motor Cover assy)	
SG Governor		54035 (Installation) 04048 04026 (Overspeed Trip) 04018 (SG/PSG Spd Adj. Motor Cover assy) 03026 (Synchronizing Motor) 03505 (Synchronizing Motor, Parts Catalog & Lube Guide)	
SGT Torque Converter Governor		04040	
TM-55P Actuator	82599	82400	
UG-5.7/8/10 Governor	03029	03040 (Dial Governor) 03036 (Lever Governor) 54042 (Installation)	
UG-5.7/8/10 Lever Governor, Pneumatic Speed Adjust	03037		

Other UG-8		03016 (UG-8 Gov, Low Lube Oil Pressure Shutdown) 03504 (UG-8 Governors, Special Tools) 03045 (UG-8 Speed Adjusting Devices) 03035 (UG-8, PM Speed Adjusting Motor) 82454 (UG-8/UG-40 Dial Governors, Stepping Motor Driver Control) 03506 (UG-8L Governors, Pneumatic Speed Setting Device) 03507 (UG-8L Governors, Manifold Pressure Fuel Limiter) 03025 (UG-8PL Gov w/ Direct or Reverse Pneumatic Speed Setting)	
UG-15 Dial Governor		26119	
UG-25+ Governor	03339	26330	51339 (Rev. B Firmware Chg Notification) 51328 (Rev. A Firmware Chg Notification) 51310 (Firmware Change Notification) 51315 (Max Spd Update Instruction) 51349 (Oil Level Gage Kit)
UG-40 Governor	03030	03039 03019 (UG-40 Govs, Aux Devices used in Marine Serv) 82454 (UG-8/UG-40 Dial Governors, Stepping Motor Driver Control)	
UG-40 DI Governor	36209	03575	
UG MAS Governor (milliamp speed setting)	03048	36063 (UG-8) 03047 (UG-8/UG-40)	
Other UG Governor		03043 (UG Governor, Limit Switches) 03013 (UG Governor, Shutdown Solenoid) 03046 (UG Governor, Vibration Resistant Motor Cover) 03027 (UG Govs, Sync/Stepping Speed Adj. Motors) 03026 (UG/PSG/SG Govs, Synchronizing Motor)	
UG-Actuator	37511	37512	
UG40 Actuator	37516	37515	

**Hydraulic Amplifiers**

	Product Spec	Technical Manual	Application Note
Hydraulic Amplifier	89007	89015 (Electrical Input Control/EG-3P) 89009 (Mechanical Input Control) 89008 (Mechanical Input Control) 89013 (Pressure Input) 89012 (85mm, Mechanically Controlled) 89005 (Servo Controlled)	

**L-Series/LCS Controls**

	Product Spec	Technical Manual	Application Note
L-Series Position Controller	03328	26237 (Position Control) 26289 (Position Control/CAN)	
L-Series Speed Control	03225	26250	51285 (Replacing the ST-125) 51272 (Replacing the TQ-125)

**MicroNet/5009 Controls**

	Product Spec	Technical Manual	Application Note
MicroNet Control System	85583		
MicroNet Plus Control System	03333	26166	
MicroNet TMR Control System	03363	26167	
Vertex-Pro Motor-Driven Compressor Control	03364	26489	

<b>MotoTron Control Solutions</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
ASM-Gage-001 CAN-Based Display Unit		36327	
ControlCore Server		36344	
ECM-0555-048 Engine Control Modules		36301	
ECM-0555-048-0403-C / -F Engine Control Modules		36313	
ECM-0555-048-0701-C / -F Engine Control Modules		36317	
ECM-0555-048-0704-C / -F Engine Control Modules		36318	
ECM-0555-048-0705-C / -F Engine Control Modules		36319	
ECM-0555-080-0701-F Engine Control Module		36314	
ECM-0555-080-0702-C / -F Engine Control Modules		36315	
ECM-0555-080-0703-C / -F Engine Control Module		36316	
ECM-0555-128-0701-C Engine Control Module		36320	
ECM-0555-128-0701-F Engine Control Module		36321	
ECM-0512-024-0502-C/F Engine Control Modules		36322	
ECM-S12X-070 Family Engine Control Modules	36348		
ECM Summary			36328
GCM-0563-048 Family of General Control Modules—Calibratable / Flash		36303	
GCM-0565-024-0602-F General Control Module		36323	
GCM-0512-024-0401-F General Control Module		36324	
GCM-0512-024-0402-F General Control Module		36325	
GCM-0512-024-0403-F General Control Module		36326	
HCM-0563-048-0801-C / -F Hydraulic Control Modules		36330	
HCM-0563-048-0802-C / -F Hydraulic Control Modules		36331	
HCM-0563-048-0803-C / -F Hydraulic Control Modules		36332	
MCS Donaldson Exhaust Monitoring Software Installation Guide		9700-1003	
MotoService Software Installation Guide		9700-1002	

<b>Valves/Fuel Systems</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Swift Gas Metering System	03252	26363	
Swift ES Gas Metering System		26496	
		26350 (Swift Safety Shutoff Valves)	

<b>Miscellaneous Diesel Engine Products</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Digital Speed Switch DSS-2 Two-Channel	36597	36598 (user manual) 36599 (installation guide)	
Magnetic Pickups (MPUs, general)	02010	82510 (MPUs & proximity switches)	
Magnetic Pickups (MPUs, former Synchro-Start products)	36533	82301 (MPU High Signal Selector)	
Magnetic Speed Sensors	36563		
<b>MOPs (Motor Operated Potentiometers)</b>	82436		
Pull Coil Timer Module		36715 (3-wire) 36714 (6-wire)	

# Gas Engine Controls

723 Product Line	Product Spec	Technical Manual	Application Note
723 Digital Controls		02758 (Digital Control Hardware) 02827 (Digital Marine Control) 37807 (Generator Control) 26097 (Position Control) 02785 (Analog Load Share) 02784 (DSL/Compatible-old) 02765 (Gas Engine I/O Node) 02755 (723/QuadraLink)	02817 (Network Binding Procedure)
LinkNet Distributed I/O Network	85572	02826 (LinkNet Option for use with 723 Digital Controls)	

723PLUS/828 Product Line	Product Spec	Technical Manual	Application Note
723PLUS Digital Control, Standard Applications	03203	02882 (723PLUS 8280-410/411)	26031 (Network Binding Procedure/DOS)
723PLUS Digital Control, Custom Control	02876	02877 (723PLUS Digital Control Hardware)	51203 (Network Binding Proc./Windows)
723PLUS Performance Control for Compressor-Drive Engines	03214	02880 (723PLUS for Marine PGA Replacement 8280-419) 26549 (723PLUS for Marine PGA Replacement 8280-1129) 37827 (Generator Control) 26425 (723PLUS Nile River Vessel Generator Control 8301-1146) 26264 (723PLUS, Single Engine Marine Applications, DSL/Compatible Input 8280-1042) 02884 (723PLUS Performance Control 8280-424) 26043 (723PLUS Performance Control 8280-598) 26227 (723PLUS Digital Marine Control, Two Engine Mechanical Load Sharing) 02883 (723PLUS w/ Process Control 8280-464/465) 26141 (723PLUS/AILS) 02879 (723PLUS/Analog Load Sharing) 26373 (723PLUS/Cat ADEM 8280-1076) 02878 (723PLUS/DSL/Compatible) 02831 (723PLUS/DSL/MSL/MSL Gateway) 26471 (723PLUS/DSL/MSL/MSL Gateway/Brazil) 02881 (723PLUS/Mechanical Load Sharing) 26310 (723PLUS/Redundant Load Sharing 8280-1056)	
828 Digital Control	02874	02875 (828 Digital Control Hardware)	

2300 Product Line	Product Spec	Technical Manual	Application Note
2300 Digital Load Sharing & Speed Control (hardware)	03318	26232	
2300G Gas Engine Control		91372	

<b>2301A Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
2301A Speed Control	82021	82020	
2301A with 4–20 mA Input	02301	02302	
2301A Load Sharing & Speed Control (9905 Series)	82390	82389 (9905/9907 Series) 26006 (9907 Series)	50533 (Wiring the 9905 Series)
2301A Load Sharing & Speed Control with Dual Dynamics	82047	82046	
2301A Load Sharing & Speed Control with Temp or Process Limiting	82387	82386 02303 (9900-430—433) 02008 (Reverse Acting Fuel Limiter 8272-789) 82348 (2301 & 2301A Controls, Preregulator)	51191 (Replacing Caterpillar 2301 Controls) 51005 (Retrofitting UG-8-Controlled Eng.) 51090 (Adapting for Torque Conv. Use) 51242 (2301A to 2301D Wiring Differences)

<b>2301D Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
2301D Digital Control	03204	26065	
2301D-EC Digital Control	03204	26247 (2301D/2301D-EC 8273-138/-139/-140/-141) 26288 (2301D/2301D-EC 8273-501/-503/-505/-507)	51263 (2301D/2301D-EC PN Differences)
2301D-JM/JH	03239	26138	
2301D Control View Standard/Professional	03232		

<b>AGLC Automatic Generator Loading Control</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
AGLC Automatic Generator Loading Control	82399	82394 (9905-063) 82004 (9905-096)	

<b>APECS Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
General		36586 (APECS Diagnostic Guide) 36718 (APECS Actuator Kit for Cummins C) 36588 (APECS Actuator Kit for Daihatsu) 36587 (APECS Actuator Kit for Kubota) 36530 (APECS DC10502 Lin. Act. for Cummins) 36550 (APECS Controllers for DYNA 2000 and 2500 Linear Actuators) 36561 (APECS 0250 Kit for Isuzu 4BG1-TRV) 36562 (APECS 0250 Kit for Isuzu 4JG1-TPV) SE-4049 (APECS 3000) 36716 (APECS 3000 Installation) SE-4050 (APECS 4000) 36752 (APECS 4500) SE-4096 (APECS 5000) 36532 (APECS 70025 Actuator for Stanadyne) 36528 (APECS DYN3-60030 Electronic Speed Switch) 36538 (APECS DYN1-1075X Ctrl's for DYNA 2000 and 2500 Linear Actuators) SE-4051 (APECS EPS 1000 Equipment Protection System) 36555 (APECS ESSE-1 Electronic Speed Switch) 36564 (APECS ESSE-2 Electronic Speed Switch)	36579 (Controllers for Stanadyne Pumps) 36728 (Repl. of Power Flow Throttles) 51319 (Centralized Suppression for DPG) 51343 (APECS 4500 Firmware Release)

		36545 (APECS MCFA Laptop Diagnostic Monitor)
		36529 (APECS Plus 1, Plus 2, Plus 4, Plus 6 Digital Governor Systems)
		SE-4054 (APECS/EPS CD-ROM Installation Guide)
0200 Integral Actuators	36582	
0225 Linear Actuators	36581	
0225 Linear Actuator w/ Boot & Clevis Plunger	36730	
0275 Linear Actuators	36578	
500 Single Speed Electronic Engine Controller	36710	36725 (Quick Installation Guide) 36513 (User Manual)
2000/2500 Linear Actuators	03324	36531 (APECS 2500)
4500CAN Controller	36549	
4800 Control System	36717	
7000 Rotary Actuator	36501	
DPG-21XX-00X Digital Controllers	36502	36526 (APECS DPG-21XX-00X) 36543 (APECS DPG-2104) 36536 (APECS DPG-2111-001) 36537 (APECS DPG-2133-00X)
DPG-2201-00X Digital Controllers	36503	36523
DPG-2223-00X Digital Controllers	36554	36522
DPG-23XX-00X Digital Controllers	36504	36527
DPG-2401-00X Digital Controllers for EFC Valves	36512	36525
DPG Series Controllers, DPG Calibration Kit	36560	

<b>Atlas Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Atlas-II Turbine and Engine Control Platform	03346	26415	
AtlasSC Engine and Turbine Control System	03253	26179 (AtlasSC) 26229 (AtlasSC Overspeed Protection System)	

<b>Digital Reference Units</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Digital Reference Unit	03218	82343 (8271-221) 82442 (8271-651) 82006 (8272-682-685) 82324 (9900-352)	

<b>EGCP Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
EGCP-2 Engine Generator Control Package	03219	26175 (EGCP-2 Application 8406-120/121) 26181 (EGCP-2 Communications 8406-120/121) 26174 (EGCP-2 8406-120/121) 26076 (EGCP-2 Installation(8406-115/116) 26086 (EGCP-2 Operation 8406-115/116) 26099 (EGCP-2 HMI & Servlink 8406-115/116) 37407 (EGCP-2/GCP-30 Load Share Interface Module)	51199 (EGCP-2 Differences) 51201 (Setpoint Worksheet) 51244 (SW Upgr. Instr. to 8406-120E/-121F) 51270 (SW Up In to 8406-120G/121H/123C) 51209 (SW Upgr. Kit Instr. Rev A to B) 51211 (SW Upgr. Kit Instr. Rev A/B to C)
EGCP-3 LS Multi-unit Load Share Version	03300	26122 (EGCP-3 Installation) 26194 (EGCP-3 LS Operation)	51281 (8406-113 Rev K SW Changes) 51294 (8406-113 Rev L SW Changes) 51313 (8406-113 Rev N SW Changes) 51361 (8406-113 Rev R SW Changes) 51247 (Single Phase Zig Zag Application)

Misc. EGCP-3

51215 (Operation with Auto. Transfer Switch)  
 51207 (Sequencing)  
 51224 (Complex Power Systems Solutions)  
 51210 (Beta Site, São Paulo, Brazil)  
 51213 (EGCP-3 & SPM-D on the Sea Jewel)

<b>Electronic Fuel Injection Products</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
ECM3 Electronic Fuel Injection Control		26348	51338 (Casting Color)
In-Pulse II Fuel Injection Control	03315		
In-Pulse Electronic Fuel Injection Control		02983 (In-Pulse) 26053 (In-Pulse PLUS)	

<b>FireFly Detonation Detection</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
FireFly Detonation Detection for Gas Engines	36156		

<b>GECO Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
GECO Lean-burn Gas Engine Control	03251	03616	
GECO Stoichiometric Gas Engine Control	03553	03554	
GECO Vista Stoichiometric Gas Engine Control	03349	03554	

<b>Governors/Actuators</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
3161 Governor	03102	03101 (3161 Governor) 03110 (Solid Piston Air Pressure Fuel Limiter) 03107 ( Speed Adj Motor w/ Manual Speed Adjust) 03108 (Air Pressure Fuel Limiter) 03105 (Electric Shutdown Device) 03109 (Load Limit Control) 03103 (Manual Shutdown Device) 03106 (Pneumatic Speed Setting Device) 03104 (Pressure Shutdown Device) 03112 (Solenoid Start Fuel Limiter) 03111 (Torque Rise) 03113 (EGB Supplement to 3161 Governor) 54110 (3161/EGB Governor/Actuator Installation)	
EG-3P/6P/10P Actuator	82516	37710 (EG-3C & EGR) 82560 (EG-3P) 82566 (EG-6P/10P) 54005 (EG-3P on DDAD V-149 Engine 8956-142) 54008 (EG-3P on Detroit Diesel I-71 Engine 8956-166) 54003 (EG-3P on DDAD V-71 & V-92 Engines 8956-143) 37714 (EG Power Transfer Control)	
EGB-1P/2P Governor/Actuator	82575	82570 54007 (EGB-2P on DDAD V-71 & V-92 Engines 8956-163) 54009 (EGB-2P on DDAD I-71 Engine 8956-162) 54006 (EGB-2P on DDAD V-149 Engine 8956-165)	

EGB-10P/13P/35P Governor/Actuator	82543	82340 (EGB-10P/13P/22P/29P/35P/58P)	
EGB-29P/58P Governor/Actuator	82483	82340 (EGB-10P/13P/22P/29P/35P/58P)	
EGB-200P/300P Governor/Actuator	82473	82462	
EGB Governor Mode Switch Assembly	82489		
Other EGBs		37709 (EGB-2C) 37729 (EGB-10, Two-Solenoid Spd Setting Mechanism) 37741 (EGB-10 Pneumatic Speed Setting, New Style) 37708 (EGB-10C) 54066 (EGB-10C/13C/35C/50C Instal) 82558 (EGB-10PLS Hydraulic Actuator) 37712 (EGB-35/50 Hydraulic Actuators) 37740 (EGB-500P)	
EPG Electrically Powered Governors	04106	82327 (512/24 & 1712/24, Single Phase Droop) 82329 (512/524 & 1712/1724 installation) 82493 (512/524 & 1712/1724 Isochronous) 82448 (501/1701) 82042 (4024) 82354 (EPG with Position Feedback) 82038 (Min/Max Control System)	50530 (Installation & Control Choices for) 50528 (Linking to a Mech Droop Gov)
EM-70/EM-140 Rotary Output Electric Actuators	40180	40178 (EM-140)	
EM-80 and EM-300 Actuators	36199	36173	
Other EM Actuators		04110 (EM-6 Actuator) 82000 (EM-10P/20P Actuators. all elec w/ electronic driver) 40152 (EM-35 Analog Driver) 40161 (EM-35 Digital Driver with Dual Feedback)	
EML-100 Actuator	40186	40183 (EML-100 Actuator) 26159 (EM/LQ Digital Driver)	
F-Series ITB	03344	26355	51305 (Conv. from Flo-Tech to F-Series) 51367 (F-Series Firmware Release)
F-Series Modular Actuator	03345	26355	
Flo-Tech ITB (Integrated Actuator/Throttle Body)	04140	04141 (Installation/Operation) 04173 (Speed Control) 04168 (Digital Min/Max Flo-Tech 8400-511 for Cummins Jade/Bravo Engines) 26467 (120 mm Throttle Valves Disassembly and Reassembly Repair Procedure) 26459 (135 mm Throttle Valves Disassembly and Reassembly Repair Procedure)	
PG Governors/General	36010	36652 (PG Automatic Safety Shutdowns & Alarms) 36646 (PG Auxiliary Compatible Torque Limiter) 36693 (PG Base Assemblies) 54056 (PG Dial & Lever Governor Installation) 36623 (PG Dial Governor, Back Pressure Controller) 36622 (PG Dial Governor, Speed Droop Linkage Mechanism) 36404 (PG Governing Troubles, Analysis & Correction of) 36601 (PG Governor, Absolute Manifold Pres Bias Load Cntr & Fuel Limit) 36600 (PG Governor Basic Elements) 36614 (PG Governor Dial Type Speed Setting) 36615 (PG Governor Lever Type Speed Setting) 36014 (PG Governor Speed Adjusting Motor) 36621 (PG Governor Speed Droop Linkage)	

		36670 (PG Governor w/ Proportional Pneumatic Output Signal)
		36644 (PG Governor, Motor Speed Setting)
		36036 (PG Governor, Starting Fuel Limiter)
		36608 (PG Governor, Transducer Type Load Control/LVDT)
		36602 (PG Governor w/ Differential Servomotor, Basic Elements)
		36631 (PG Governor w/ Trque Adv at Idle, Man Press Bias Ld Cntrl & Fuel Lim)
		36630 (PG Governors, Basic Load Control System)
		36642 (PG Governors, Dynamic Brake Control)
		36691 (PG Governors, Electronic Speed Setting/PG-TR)
		36640 (PG Governors, Extensible Tailrod)
		36405 (PG Governors, Special Tools)
		36607 (PG Governors, Two-Slope Load Control)
		36637 (PG-Integral EG Actuator for PG Governors)
		36695 (PG Manifold Air Pressure Bias Fuel Limiter)
		36661 (PG Manifold Gauge Pressure Fuel Limiter)
		36697 (PG Manual Reset Device for De-Energized-to-Shutdown)
		36605 (PG Overspeed Trip Test Device)
		36692 (PG Power Cylinder Assemblies)
		36680 (PG Preloaded Buffer Springs)
		36651 (PG Pressure Actuated Shutdown Assembly)
		36053 (PG Rail Enhancement Kit 8956-501)
		36685 (PG Shutdown Solenoid Dial & Lever)
		36660 (PG Speed Setting Fuel Limiter)
		36662 (PG Torque Limit Control with Speed Droop)
PG-200/300 Governor	36619	36618 (Case, Accumulator, & Power Cylinder)
		36054 (Dual Buffer System)
PG-500 Governor	36634	36633 (Case, Accumulator, & Power Cylinder)
		36054 (Dual Buffer System)
PGA Governor	36701	36604
		54054 (Installation)
		36606 (8554-255 supplement to 36604)
		36643 (Lever Speed Setting)
		36679 (Pneumatic Load Balance System)
		36686 (Pneumatic Load Balance System)
		36702 (Weatherproofing Kit)
		36650 (Solenoid Operated Shutdown Assembly)
		36636 (PGA-58 & 200/300 Vibration Resistant Governor)
		36629 (PGA-TL Governor 8558-657)
PGA-EG Governor/Actuator	36638	54069 (PGA-EG, PGG-EG, PGM-EG 12/29/58 Installation)
		54065 (PGA-EG, PGG-EG, PGM-EG, 200/300/500 Installation)
PGG Governor	36626	36627
PGG-EG Governor/Actuator	36635	54069 (PGA-EG, PGG-EG, PGM-EG 12/29/58 Installation)
		54065 (PGA-EG, PGG-EG, PGM-EG, 200/300/500 Installation)
PGPL Actuator/Driver	37520	37519
PG-PL Governor	36700	36694
		54052 (Installation)
		36702 (Weatherproofing Kit)
		36650 (Solenoid Operated Shutdown Assembly)

Other PG Governors/Actuators		36603 (PG-35 & PG-50 Governors) 36653 (PGD/PGL Governors, Pressure Actuated Shutdown) 54053 (PGE & PGEV Locomotive Governor Installation) 36703 (PGE & PGEV Locomotive Governors) 36628 (PGEV Governor 8573-463/494, 8570-687, 8559-910) 82328 (PGTM-200 Actuator) 36696 (PG-TR Electronic Speed Setting 8272-639)	
ProAct I/II Actuator	04122	04121 (ProAct I/II) 04176 (ProAct II Actuator and Driver) 36060 (ProAct II Technical Supplement)	51317 (Start-up Fuel Limiting add. to 04121)
ProAct III/IV Actuator	04126	04127	
ProAct V Actuator		04193	
ProAct Analog and Digital Plus	03231	26112 (ProAct Digital Plus) 26147 (ProAct Analog Actuator with Integral Driver)	
ProAct ISC (Integrated Speed Control)	03326	26246	51325 (5418-2949 Firmware Release)
PSG Governor	37010	54055 (Installation) 37013 (Aluminum Case) 37017 (Cast Iron Case) 03026 (Synchronizing Motor)	50516 (Governor Linkage)
PSG Governor, PM Speed Adjusting Motor	37014	04018 (SG/PSG Spd Adj. Motor Cover assy)	
SG Governor		54035 (Installation) 04048 04026 (Overspeed Trip) 04018 (SG/PSG Spd Adj. Motor Cover assy) 03026 (Synchronizing Motor) 03505 (Synchronizing Motor, Parts Catalog & Lube Guide)	
SGT Torque Converter Governor		04040	
TM-55P Actuator	82599	82400	
UG-5.7/8/10 Governor	03029	03040 (Dial Governor) 03036 (Lever Governor) 54042 (Installation)	
UG-5.7/8/10 Lever Governor, Pneumatic Speed Adjust	03037		
Other UG-8		03016 (UG-8 Gov, Low Lube Oil Pressure Shutdown) 03504 (UG-8 Governors, Special Tools) 03045 (UG-8 Speed Adjusting Devices) 03035 (UG-8, PM Speed Adjusting Motor) 82454 (UG-8/UG-40 Dial Governors, Stepping Motor Driver Control) 03506 (UG-8L Governors, Pneumatic Speed Setting Device) 03507 (UG-8L Governors, Manifold Pressure Fuel Limiter) 03025 (UG-8PL Gov w/ Direct or Reverse Pneumatic Speed Setting)	
UG-15 Dial Governor		26119	
UG-25+ Governor	03339	26330	51339 (Rev. B Firmware Chg Notification) 51328 (Rev. A Firmware Chg Notification) 51310 (Firmware Change Notification) 51315 (Max Spd Update Instruction) 51349 (Oil Level Gage Kit)

UG-40 Governor	03030	03039 03019 (UG-40 Govs, Aux Devices used in Marine Serv) 82454 (UG-8/UG-40 Dial Governors, Stepping Motor Driver Control)
UG-40 DI Governor	36209	03575
UG MAS Governor (milliamp speed setting)	03048	36063 (UG-8) 03047 (UG-8/UG-40)
Other UG Governor		03043 (UG Governor, Limit Switches) 03013 (UG Governor, Shutdown Solenoid) 03046 (UG Governor, Vibration Resistant Motor Cover) 03027 (UG Govs, Sync/Stepping Speed Adj. Motors) 03026 (UG/PSG/SG Govs, Synchronizing Motor)
UG-Actuator	37511	37512
UG40 Actuator	37516	37515

<b>Hydraulic Amplifiers</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Hydraulic Amplifier	89007	89015 (Electrical Input Control/EG-3P) 89009 (Mechanical Input Control) 89008 (Mechanical Input Control) 89013 (Pressure Input) 89012 (85mm, Mechanically Controlled) 89005 (Servo Controlled)	

<b>Ignition Controls</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
IC-100 CD Ignition System	03229	26205	
IC-900/IC-910 Ignition Controller		26125 (IC-900/IC-910 Ignition Controller) 26222 (IC/TIS-910 Ignition Controller 8408-102/702) 26142 (IC-912 Ignition Controller)	
IC-920/IC-922 Ignition Controllers with Servlink	03331	26263	
TIS-910 Ignition Controller		26222 (IC/TIS-910 Ignition Controller 8408-102/702) 26139 (TIS-910 Ignition Controller 8408-701)	

<b>L-Series/LCS Controls</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
L-Series Air/Fuel Ratio Control	03255	26251	36719 (Config. Instr. for Bi-Fuel Apps) 51316 (Firmware Release SW Changes)
L-Series Position Controller	03328	26237 (Position Control) 26289 (Position Control/CAN)	
L-Series Speed Control	03225	26250	51285 (Replacing the ST-125) 51272 (Replacing the TQ-125)
Other L-Series Controls		26272 (Communication Kit Installation Sheet) 26283 (In-line Power Module)	
LC-50 Integrated gas mixer/throttle body/programmable speed control	03222	26249	
Other LCS Controls/Actuators		26098 (LCS-Adapt. of LCS Cont./Pump Cvr Assy to Stanadyne 'D' Series Pumps) 26187 (LCS-Retrofit of LCS Cont./Pump Cvr Assy to Stanadyne 'D' Series Pumps)	

<b>MicroNet/5009 Controls</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
MicroNet Control System	85583		
MicroNet Plus Control System	03333	26166	
MicroNet TMR Control System	03363	26167	
Vertex-Pro Motor-Driven Compressor Control	03364	26489	

<b>MotoTron Control Solutions</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
ASM-Gage-001 CAN-Based Display Unit		36327	
ControlCore Server		36344	
ECM-0555-048 Engine Control Modules		36301	
ECM-0555-048-0403-C / -F Engine Control Modules		36313	
ECM-0555-048-0701-C / -F Engine Control Modules		36317	
ECM-0555-048-0704-C / -F Engine Control Modules		36318	
ECM-0555-048-0705-C / -F Engine Control Modules		36319	
ECM-0555-080-0701-F Engine Control Module		36314	
ECM-0555-080-0702-C / -F Engine Control Modules		36315	
ECM-0555-080-0703-C / -F Engine Control Module		36316	
ECM-0555-128-0701-C Engine Control Module		36320	
ECM-0555-128-0701-F Engine Control Module		36321	
ECM-0512-024-0502-C/F Engine Control Modules		36322	
ECM-S12X-070 Family Engine Control Modules	36348		
ECM Summary			36328
GCM-0563-048 Family of General Control Modules—Calibratable / Flash		36303	
GCM-0565-024-0602-F General Control Module		36323	
GCM-0512-024-0401-F General Control Module		36324	
GCM-0512-024-0402-F General Control Module		36325	
GCM-0512-024-0403-F General Control Module		36326	
HCM-0563-048-0801-C / -F Hydraulic Control Modules		36330	
HCM-0563-048-0802-C / -F Hydraulic Control Modules		36331	
HCM-0563-048-0803-C / -F Hydraulic Control Modules		36332	
MCS Donaldson Exhaust Monitoring Software Installation Guide		9700-1003	
MotoService Software Installation Guide		9700-1002	

<b>OH Vehicular Products</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
OH1 Control System	03224		
EDM-HD Electronic Distributor Module—Heavy Duty	03341		

<b>Overspeed Protection</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Trooper Safety System with Integrated Overspeed Protection	03372		

<b>Valves/Fuel Systems</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
SOGAV 2.2 Solenoid Operated Gas Admission Valves	04172	04153 (Installation and Operation) 04161 (Installation Sheet)	
SOGAV 36 Solenoid Operated Gas Admission Valve	03299	26209	

SOGAV 43/105 Solenoid Operated Gas Admission Valves	04151	04156 (SOGAV 43 Installation Sheet) 04157 (SOGAV 105 Installation Sheet) 26499 (SOGAV 105 Unbalanced/Bottom-Load Installation and Operation)
SOGAV 250 Solenoid Operated Gas Admission Valve	03316	26114 (Unbalanced Version Installation and Operation) 26113 (Installation Sheet)
<b>SOGAV General</b>		51243 (Reducing Emissions w/ SOGAV)
Swift Gas Metering System	03252	26363
Swift ES Gas Metering System		26496 26350 (Swift Safety Shutoff Valves)
<b>TecJet 50</b>		36102
TecJet 50 Plus Precision Flow Intelligent Electronic Gas Metering Valve	03330	26219
TecJet 52 Intelligent Electronic Gas Metering Valve	03355	26399
TecJet 110 Intelligent Electronic Gas Metering Valve	03317	26185

<b>Miscellaneous Gas Engine Products</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Digital Speed Switch DSS-2 Two-Channel	36597	36598 (user manual) 36599 (installation guide)	
EGS Control System for Industrial Spark-Ignited Engines	03336		51330 (Lean Burn Trim Alarm Relay Output)
EGS Trim System for Lean Burn Industrial Spark-Ignited Engines	03359	36139 (EGS-01 Digital Engine Gas Metering System) 26261 (EGS-01 Inst. Supp. to 36139 for Cat. G3500A)	51331 (Repl. EGS-01 w/ EGS Full Authority) 51334 (EGS TE Learn Function) 51335 (Trim Knock Ctrl Strategies) 51357 (E3 Lean Burn Trim Wiring)
Magnetic Pickups (MPUs, general)	02010	82510 (MPUs & proximity switches)	
Magnetic Pickups (MPUs, former Synchro-Start products)	36533	82301 (MPU High Signal Selector)	
Magnetic Speed Sensors	36563		
MI-04 Control System for Alternative-Fueled Off-Highway Vehicles	03313		
MI-07 Integrated Engine Control System	36544		
MOPs (Motor Operated Potentiometers)	82436		
N-CA225 Series Carburetors for LP and Natural Gas Fueled Engines	03379		
PG-04 Control System for Stationary Industrial Equipment	36534	36571	
PG-07 Power Generation & Stationary Control System	36535		
Repair Kits			51264 (N-RK2001-RSA) 51282 (5233-1005-RK N-H420) 51307 (CA100, MI-07)
PG-08 Power Generation & Stationary Engine Control System	36576		
Shutdown Solenoids (Kubota Engines)	36573		
TG-13 Governor for Ajax Engines	04049	54103	

# Steam Turbine Controls

## General Steam Turbine Application Notes

- 51240 (Software Overview for Turbines)
- 83407 (Steam and Gas Turbine Retrofit)
- 51237 (Comprehensive Steam Turbine Control for Various Applications)
- 51238 (Standard Controls for Steam Turbines)
- 51236 (Simple Mechanical Drive Steam Turbine Applications)
- 51253 (Woodward Actuator and Valve Selector)

505 Product Line	Product Spec	Technical Manual	Application Note
505 Digital Governor for Steam Turbines	03348	85017 (505 Single/Split-Range) 85003 (505) 26347 (505 Enhanced) 26045 (Configuration Upload/Download) 85015 (OpView Operator Interface)	51245 (Features/Functions) 51351 (Steam Turbine Retrofit example) 51364 (Geothermal Application)
505CC-2 Integrated Turbine and Compressor Control	03298	26240 (8701-1114) 26451 (8701-1356)	
505DE for Double Automatic Extraction/Admission Steam Turbines	03312	26361	51336 (new product announcement)
505E Digital Governor for Extraction Steam Turbines	03365	85018 (505E) 26045 (505/505E Configuration) 85015 (OpView Operator Interface)	51245 (Features/Functions)
505LST for Large Steam Turbines	03259	26440 (9907-169/170/171) 26173 (9907-810/811/812)	

2300 Product Line	Product Spec	Technical Manual	Application Note
2300 Digital Load Sharing & Speed Control (hardware)	03318	26232	

2301A Product Line	Product Spec	Technical Manual	Application Note
2301A Speed Control	82021	82020	
2301A with 4–20 mA Input	02301	02302	
2301A Load Sharing & Speed Control (9905 Series)	82390	82389 (9905/9907 Series) 26006 (9907 Series)	50533 (Wiring the 9905 Series)
2301A Load Sharing & Speed Control with Dual Dynamics	82047	82046	

2301A Load Sharing & Speed Control with Temp or Process Limiting	82387	82386	
		02303 (9900-430—433)	
		02008 (Reverse Acting Fuel Limiter 8272-789)	
		82348 (2301 & 2301A Controls, Preregulator)	
			51191 (Replacing Caterpillar 2301 Controls)
			51005 (Retrofitting UG-8-Controlled Eng.)
			51090 (Adapting for Torque Conv. Use)
			51242 (2301A to 2301D Wiring Differences)

<b>2301D Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
2301D-ST Digital Control for Small Steam Turbines	03297	26184	51235 (Simple Generator Drive Apps)

<b>MicroNet/5009 Controls</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
MicroNet Control System	85583		
MicroNet Plus Control System	03333	26166	
MicroNet TMR Control System	03363	26167	51345 (China's Largest Refinery) 51363 (Xcel Energy Tolk Station)
MicroNet Safety Module	03375		
Vertex-Pro Motor-Driven Compressor Control	03364	26489	
5009 Fault Tolerant Control	85578	85580 (5009) 26320 (5009C) 36122 (Citect HMI)	
5009FT Fault Tolerant Control	03373	26518	
5009LST Fault Tolerant Controller	03290		
Other MicroNet Information		26023 (5009 PCI Software Getting Started) 26200 (MicroNet replacement for 511 DCS) 26395 (Turbine Control Panel for LM6000PD) 80009 (Service Panel Operator's Manual)	51314 (Analog Combo Speed Sensing) 51192 (Ethernet Module 5466-411) 51308 (Ladder Logic On/Off Status) 51297 (Svc Pack Install. for RTN Module) 51304 (Use of Woodward Notch Filter)

<b>Atlas Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Atlas-II Turbine and Engine Control Platform	03346	26415	
AtlasSC Engine and Turbine Control System	03253	26179 (AtlasSC) 26229 (AtlasSC Overspeed Protection System)	

<b>Governors/Actuators</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
3161 Governor	03102	03101 (3161 Governor) 03110 (Solid Piston Air Pressure Fuel Limiter) 03107 ( Speed Adj Motor w/ Manual Speed Adjust) 03108 (Air Pressure Fuel Limiter) 03105 (Electric Shutdown Device) 03109 (Load Limit Control) 03103 (Manual Shutdown Device) 03106 (Pneumatic Speed Setting Device) 03104 (Pressure Shutdown Device) 03112 (Solenoid Start Fuel Limiter) 03111 (Torque Rise) 03113 (EGB Supplement to 3161 Governor) 54110 (3161/EGB Governor/Actuator Installation)	
EG-3P/6P/10P Actuator	82516	37710 (EG-3C & EGR) 82560 (EG-3P) 82566 (EG-6P/10P) 37714 (EG Power Transfer Control)	
EGB-10P/13P/35P Governor/Actuator	82543	82340 (EGB-10P/13P/22P/29P/35P/58P)	
EGB-29P/58P Governor/Actuator	82483	82340 (EGB-10P/13P/22P/29P/35P/58P)	
EGB-200P/300P Governor/Actuator	82473	82462	
EGB Governor Mode Switch Assembly	82489		
Other EGBs		37709 (EGB-2C) 37729 (EGB-10, Two-Solenoid Spd Setting Mechanism) 37741 (EGB-10 Pneumatic Speed Setting, New Style) 37708 (EGB-10C) 54066 (EGB-10C/13C/35C/50C Instal) 82558 (EGB-10PLS Hydraulic Actuator) 37712 (EGB-35/50 Hydraulic Actuators) 37740 (EGB-500P)	
EM-80 and EM-300 Actuators	36199	36173	
Other EM Actuators		04110 (EM-6 Actuator) 82000 (EM-10P/20P Actuators. all elec w/ electronic driver) 40152 (EM-35 Analog Driver) 40161 (EM-35 Digital Driver with Dual Feedback)	
EML-100 Actuator	40186	40183 (EML-100 Actuator) 26159 (EM/LQ Digital Driver)	
PG-200/300 Governor	36619	36618 (Case, Accumulator, & Power Cylinder) 36054 (Dual Buffer System)	
PG-500 Governor	36634	36633 (Case, Accumulator, & Power Cylinder) 36054 (Dual Buffer System)	

PGA Governor	36701	36604 54054 (Installation) 36606 (8554-255 supplement to 36604) 36643 (Lever Speed Setting) 36679 (Pneumatic Load Balance System) 36686 (Pneumatic Load Balance System) 36702 (Weatherproofing Kit) 36650 (Solenoid Operated Shutdown Assembly) 36636 (PGA-58 & 200/300 Vibration Resistant Governor) 36629 (PGA-TL Governor 8558-657)	
PGPL Actuator/Driver	37520	37519	
PG-PL Governor	36700	36694 54052 (Installation) 36702 (Weatherproofing Kit) 36650 (Solenoid Operated Shutdown Assembly)	
Other PG Governors/Actuators		36603 (PG-35 & PG-50 Governors) 36653 (PGD/PGL Governors, Pressure Actuated Shutdown) 54053 (PGE & PGEV Locomotive Governor Installation) 36703 (PGE & PGEV Locomotive Governors) 36628 (PGEV Governor 8573-463/494, 8570-687, 8559-910) 82328 (PGTM-200 Actuator) 36696 (PG-TR Electronic Speed Setting 8272-639)	
PSG Governor	37010	54055 (Installation) 37013 (Aluminum Case) 37017 (Cast Iron Case) 03026 (Synchronizing Motor)	50516 (Governor Linkage)
PSG Governor, PM Speed Adjusting Motor	37014	04018 (SG/PSG Spd Adj. Motor Cover assy)	
SG Governor		54035 (Installation) 04048 04026 (Overspeed Trip) 04018 (SG/PSG Spd Adj. Motor Cover assy) 03026 (Synchronizing Motor) 03505 (Synchronizing Motor, Parts Catalog & Lube Guide)	
SGT Torque Converter Governor		04040	
TG Governors	04038	04041 (TG-10) 04042 (TG-13 & TG-17) 04047 (TG-13, -17 Gov, Pneumatic Speed Setting Device)	
TG611-13/-17 Governors with Overspeed Test Device	03368	04042	51348 (conversion kit) 51354 (flyer)
TG-13E/17E Actuator	04044	04045 (TG-10E, -13E & -17E Actuators)	
TM-25LP & TM-200LP Actuators	82451	82450	50525 (Changing Output Direction)
TM-55P Actuator	82599	82400	
UG-5.7/8/10 Governor	03029	03040 (Dial Governor) 03036 (Lever Governor) 54042 (Installation)	
UG-5.7/8/10 Lever Governor, Pneumatic Speed Adjust	03037		

Other UG-8		03016 (UG-8 Gov, Low Lube Oil Pressure Shutdown) 03504 (UG-8 Governors, Special Tools) 03045 (UG-8 Speed Adjusting Devices) 03035 (UG-8, PM Speed Adjusting Motor) 82454 (UG-8/UG-40 Dial Governors, Stepping Motor Driver Control) 03506 (UG-8L Governors, Pneumatic Speed Setting Device) 03507 (UG-8L Governors, Manifold Pressure Fuel Limiter) 03025 (UG-8PL Gov w/ Direct or Reverse Pneumatic Speed Setting)	
UG-15 Dial Governor		26119	
UG-25+ Governor	03339	26330	51339 (Rev. B Firmware Chg Notification) 51328 (Rev. A Firmware Chg Notification) 51310 (Firmware Change Notification) 51315 (Max Spd Update Instruction) 51349 (UG-25+ Oil Level Gage Kit)
UG-40 Governor	03030	03039 03019 (UG-40 Govs, Aux Devices used in Marine Serv) 82454 (UG-8/UG-40 Dial Governors, Stepping Motor Driver Control)	
UG-40 DI Governor	36209	03575	
UG MAS Governor (milliamp speed setting)	03048	36063 (UG-8) 03047 (UG-8/UG-40)	
Other UG Governor		03043 (UG Governor, Limit Switches) 03013 (UG Governor, Shutdown Solenoid) 03046 (UG Governor, Vibration Resistant Motor Cover) 03027 (UG Govs, Sync/Stepping Speed Adj. Motors) 03026 (UG/PSG/SG Govs, Synchronizing Motor)	
UG-Actuator	37511	37512	
UG40 Actuator	37516	37515	

**Hydraulic Amplifiers**

	Product Spec	Technical Manual	Application Note
Hydraulic Amplifier	89007	89015 (Electrical Input Control/EG-3P) 89009 (Mechanical Input Control) 89008 (Mechanical Input Control) 89013 (Pressure Input) 89012 (85mm, Mechanically Controlled) 89005 (Servo Controlled)	

**Peak 150 Product Line**

	Product Spec	Technical Manual	Application Note
Peak 150 Digital Control for Steam Turbines	85549	85548 (8200-001/002/003/004/005) 85565 (8200-008 to 019,9905-857 to 868)	

<b>ProTech Overspeed Protection</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
ProTech 203 Overspeed Protection System	85562	85196 (9905-750 through 756, 989 through 999) 85191 (9905-869—886, 9907-145) 85201 (9905-903) 85195 (9905-975 through -986) 85204 (9907-146 through -151) 85205 (8200-200—205, 9907-344,-345) 85206 (8200-206—211, 9907-346, -347)	
ProTech-GII Overspeed Protection Device	03370		
ProTechTPS Total Protection System	03371		
Trooper Safety System with Integrated Overspeed Protection	03372		

<b>STS100 Simulator Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
STS100 Steam Turbine Simulator	03206	26044 (STS100 Interface Software) 26210 (STS100 Steam Turbine Simulator) 26217 (STS100P Simulator w/ Op. Panel)	

<b>Valves/Fuel Systems</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
CPC Current-to-Pressure Converter	85202	89543 (standard) 26248 (explosion-proof) 37839 (Redundant Duplex CPC Skid Assembly)	51190 (I/H to CPC Conversion Kit) 51309 (Internal Filter Prod. Chg. Notif.)
CPC-II Current-to-Pressure Converter	03352	26448 (CPC-II)	51327 (new product announcement) 51353 (flyer)
EHPC Electrohydraulic Power Cylinder	85189	85186 (standard) 85207 (EHPC w/ onboard driver) 85184 (single acting 8921-012) 85199 (single acting 8921-018)	51301 (SV32 Replacement Procedure)
EHPS Electrohydraulic Power Servo	03342	26063	
H-Spring Hydraulic Actuator (HDA-L, HDA-R)	03343		
SPC Servo Position Controller	03254	26236 (8200-224/-225/-226)	51322 (Upgrading DRFDs to SPCs)

# Gas Turbine Controls

## General Gas Turbine Application Notes

51240 (Software Overview for Turbines)  
 83407 (Steam and Gas Turbine Retrofit)  
 51239 (Controls for Gas Turbines)  
 83404 (Dev of Gas Fuel Cont Sys for DLN Aero Derivative Gas Turbines)  
 51253 (Woodward Actuator and Valve Selector)  
 83406 (Fuel Metering Systems for Dry Low Emissions Gas Turbine Engine)  
 83410 (Gas Turbine Control on Sour Gas)

2300 Product Line	Product Spec	Technical Manual	Application Note
2300 Digital Load Sharing & Speed Control (hardware)	03318	26232	

2301A Product Line	Product Spec	Technical Manual	Application Note
2301A Speed Control	82021	82020	
2301A with 4–20 mA Input	02301	02302	
2301A Load Sharing & Speed Control (9905 Series)	82390	82389 (9905/9907 Series) 26006 (9907 Series)	50533 (Wiring the 9905 Series)
2301A Load Sharing & Speed Control with Dual Dynamics	82047	82046	
2301A Load Sharing & Speed Control with Temp or Process Limiting	82387	82386 02303 (9900-430—433) 02008 (Reverse Acting Fuel Limiter 8272-789) 82348 (2301 & 2301A Controls, Preregulator)	51191 (Replacing Caterpillar 2301 Controls) 51005 (Retrofitting UG-8-Controlled Eng.) 51090 (Adapting for Torque Conv. Use) 50536 (Split-Shaft Gas Turbine) 51242 (2301A to 2301D Wiring Differences)

2301D Product Line	Product Spec	Technical Manual	Application Note
2301D-GT Digital Control for Small Gas Turbines	03236	26144	
2301D-KG2 for Dresser-Rand KG Type Gas Turbine	91346	91347	

Atlas Product Line	Product Spec	Technical Manual	Application Note
Atlas-II Turbine and Engine Control Platform	03346	26415	
AtlasSC Engine and Turbine Control System	03253	26179 (AtlasSC) 26229 (AtlasSC Overspeed Protection System)	

AtlasPC (replaced by Atlas-II)	85586 (Hardware)	51193 (AtlasPC Fixed IP Address)
	26103 ( NT RTOS Software Tools)	51226 (VxWorks RTOS Field Conversion)
	26199 ( VxWorks RTOS SW Tools, 8273-2xx series)	
	26266 ( VxWorks RTOS SW Tools, 8273-4xx series)	

<b>Governors/Actuators</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
EG-3P/6P/10P Actuator	82516	37710 (EG-3C & EGR) 82560 (EG-3P) 82566 (EG-6P/10P) 37714 (EG Power Transfer Control)	
EGB-10P/13P/35P Governor/Actuator	82543	82340 (EGB-10P/13P/22P/29P/35P/58P)	
EGB-29P/58P Governor/Actuator	82483	82340 (EGB-10P/13P/22P/29P/35P/58P)	
Other EGBs		37709 (EGB-2C) 37729 (EGB-10, Two-Solenoid Spd Setting Mechanism) 37741 (EGB-10 Pneumatic Speed Setting, New Style) 37708 (EGB-10C) 54066 (EGB-10C/13C/35C/50C Instal) 82558 (EGB-10PLS Hydraulic Actuator) 37712 (EGB-35/50 Hydraulic Actuators) 37740 (EGB-500P)	
EPG Electrically Powered Governors	04106	82327 (512/24 & 1712/24, Single Phase Droop) 82329 (512/524 & 1712/1724 installation) 82493 (512/524 & 1712/1724 Isochronous) 82448 (501/1701) 82042 (4024) 82354 (EPG with Position Feedback) 82038 (Min/Max Control System)	50530 (Installation & Control Choices for) 50528 (Linking to a Mech Droop Gov)
EM-70/EM-140 Rotary Output Electric Actuators	40180	40178 (EM-140)	
EM-80 and EM-300 Actuators	36199	36173	
Other EM Actuators		04110 (EM-6 Actuator) 82000 (EM-10P/20P Actuators, all elec w/ electronic driver) 40152 (EM-35 Analog Driver) 40161 (EM-35 Digital Driver with Dual Feedback)	
EML-100 Actuator	40186	40183 (EML-100 Actuator) 26159 (EM/LQ Digital Driver)	
PG-200/300 Governor	36619	36618 (Case, Accumulator, & Power Cylinder) 36054 (Dual Buffer System)	
PSG Governor	37010	54055 (Installation) 37013 (Aluminum Case) 37017 (Cast Iron Case) 03026 (Synchronizing Motor)	50516 (Governor Linkage)
PSG Governor, PM Speed Adjusting Motor	37014	04018 (SG/PSG Spd Adj. Motor Cover assy)	
SG Governor		54035 (Installation) 04048 04026 (Overspeed Trip) 04018 (SG/PSG Spd Adj. Motor Cover assy) 03026 (Synchronizing Motor) 03505 (Synchronizing Motor, Parts Catalog & Lube Guide)	

SGT Torque Converter Governor		04040	
TM-25LP & TM-200LP Actuators	82451	82450	50525 (Changing Output Direction)
TM-55 Integrating Actuator	82767	82768	
TM-55P Actuator	82599	82400	
Other TM Actuators		45015 (TM-40LP Actuator) 40171 (TM-100 Dual Feedback Dig. Driver - UL Version) 40144 (TM-100 Dual Feedback Driver) 40170 (TM-100 Single Feedback Dig. Driver - UL Version) 40143 (TM-100 Single Feedback Driver) 45014 (TM-1000LP Linear-Proportional Actuator) 45012 (TM-1000LP Linear-Proportional Actuator & Attached Steam Valve) 40130 (TM Modular Actuator and Steam Valve Assembly) 40129 (TM Modular Servo Valve)	
UG MAS Governor (milliamp speed setting)	03048	36063 (UG-8) 03047 (UG-8/UG-40)	
UG-Actuator	37511	37512	
UG40 Actuator	37516	37515	

<b>GTC Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
GTC100 & GTC200 Gas Turbine Controllers	03319	26284 (GTC100) 26262 (GTC200)	
GTC190 Large Industrial Gas Turbine Control System		26302	
GTC190A Large Industrial Gas Turbine Control System		26432	
GTC190A-FC Large Industrial Gas Turbine Control System	03356		
GTC190A-TC Large Industrial Gas Turbine Control System	03353		
GTC250 Aero-derivative Gas Turbine Control	03303	26224	
GTC250A Aero-derivative Gas Turbine Control		26433	
GTC250A-FC Aero-derivative Gas Turbine Control	03357	26477	
GTC250A-TC Aero-derivative Gas Turbine Control	03351		

<b>MicroNet/5009 Controls</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
MicroNet Control System	85583		
MicroNet Plus Control System	03333	26166	
MicroNet TMR Control System	03363	26167	
MicroNet Safety Module	03375		
Vertex-Pro Motor-Driven Compressor Control	03364	26489	

<b>ProTech Overspeed Protection</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
ProTech 203 Overspeed Protection System	85562	85196 (9905-750 through 756, 989 through 999) 85191 (9905-869—886, 9907-145) 85201 (9905-903) 85195 (9905-975 through -986) 85204 (9907-146 through -151) 85205 (8200-200—205, 9907-344,-345) 85206 (8200-206—211, 9907-346, -347)	
ProTech-GII Overspeed Protection Device	03370		
Trooper Safety System with Integrated Overspeed Protection	03372		

<b>Valves/Fuel Systems</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
1907 Large Gas Fuel Valve		45001 45000 (1907 Servo-Limiter)	
1907 Large Liquid Fuel Valve	40125	45002 45000 (1907 Servo-Limiter)	
1907 Large Liquid Fuel Valve with EM-35 Actuator	40158	40159	
1907 Small Gaseous Fuel Valve/Limiter		40100	
1907 Small Liquid Fuel Valve/Limiter	40102	40053	
Other 1907 Small Liquid Fuel Valves		55723 (1907 Small Liquid Fuel Valve & EG-3P) 40131 (1907 Small Liquid Fuel Valve with LVDT Position Fdbk) 45011 (1907 Small Liquid Fuel Valve with Solid Piston Limiter)	
3055 Valve/Actuators		40122 (3055 Liquid Fuel Metering Valve/Act Assembly 9902-220) 26211 (3055 Liquid Fuel Metering Valve/Act Assembly 9902-358) 26213 (3055 VSV Actuators) 40124 (3055 VSV Servo Valve & VSV Actuators 9902-222, 223)	
3103 Gas Valve with EM-35 Actuator		40154	
3103 Gas Valve with EM35MR1 Actuator	03209	40185	
3103 Gas Valve with TM-55I Actuator		40103	
3103 Gas Valve with TM-55P Actuator	40106	40104	
3103 Gas Valve with TM-100 Actuator		40155	
3130 Gas Valve with TM-300P Actuator		40105	
3145 Liquid Fuel Valve with TM-5L Actuator		40108	
3145 Liquid Fuel Valve with TM-40LP Actuator		40121	
3151A Water Valve with EML-100 Actuator	40187	40181	
3151A Water Valve with TM-5L Integrating Actuator		40112	
3151A Water Valve with TM-40LP Actuator	40119	40120	
3171 Gas Valve with TM-55 Integrating Actuator		40115	
3171A Gas Valve with EM-35 Actuator		40153	
3171A Gas Valve with EM35MR		26118	
3171A Gas Valve with TM-100 Actuator		40157	
CPC Current-to-Pressure Converter	85202	89543 (standard) 26248 (explosion-proof) 37839 (Redundant Duplex CPC Skid Assembly)	51190 (I/H to CPC Conversion Kit) 51309 (Internal Filter Prod. Chg. Notif.)
CPC-II Current-to-Pressure Converter	03352	26448 (CPC-II)	51327 (new product announcement) 51353 (flyer)
ELV Electric Liquid Fuel Valve	85190	37521	
Gas Shutoff Valve 25 (GSOV25)	40176	40172	
Gas Shutoff Valve 25 High Temperature/Pressure (GSOV25 HT)	03286	26190	
Gas Stop/Ratio Valves		26297 (Gas Stop Valve) 26093 (Gas Stop/Ratio Valve) 26376 (Gas Stop/Ratio Valve, 10-inch) 26230 (Gas Stop/Ratio Valve with Electric Trip) 26299 (Gas Stop/Ratio Valve with Intrinsically Safe Components) 26276 (Gas Stop/Ratio Valve, SS-260) 26417 (Gas Stop/Ratio Valve, SS-260, with Electric Trip)	
Glo-Tech Bypass Valve		26204 26146 (Glo-Tech to ProAct Adapter Kit)	
GS3 Valve Driver, GS3 Gas Fuel Valve/Actuator Assembly		40146	

GS6 Gas Metering System	03256	26171 (standard) 26513 (GS6 w/ on-board electronic controller) 26328 (Mass Flow Metering Leg for GS6 Valve) 26328sup (supplement for Zone 1 connectors)	51342 (GS6 Flushing Procedure) 51372 (VPC Firmware Update)
GS10 Gas Metering System	45021	40167 (GS10 Valve Driver, GS10 Gas Fuel Valve/Actuator Assy)	
GS16 Gas Metering System	03284	26228 (GS16) 26514 (GS16 with On-board Electronic Controller) 26418 (GS16DR Dual Resolver)	51372 (VPC Firmware Update)
GS25 Valve Driver, GS25 Gas Fuel Valve/Act Assy, Opt GS25 Shutoff Valve)		40168	
HGV Hydraulic Globe Valves	03314	26170 (HGV Gas Fuel Throttle Valve) 26368 (3" Liquid Globe Valves) 26367 (8, 10, & 12" Globe Valves) 26371 (supp. to 26367, blow-down/hydro test) 26369 (16" Globe Valves) 26370 (20x26" Steam Conditioning Globe Valve) 26372 (supp. to 26369/26370, blow-down/hydro test) 26186 (EGV Electric Globe Valve)	
H-Spring Hydraulic Actuator (HDA-L, HDA-R)	03343		
Hydraulic Pumps		45010 (2057 Hydraulic Pump 9902-041, 042, 072, 8580-042, 053, 066) 26270 (2057 Hydraulic Pump 9902-072) 40123 (3055 Hydraulic Pump and Manifold Plate) 26212 (3055 Hydraulic Pump/Servo Valve Assembly) 40133 (3230 Hydraulic Pump 9904-205)	
2000 Series Pumps	55111	55110	
IGV (Inlet Guide Vane) / VSV (Variable Stator Vane) Controls		40136 (Dual Servo Valve and VSV and IGV Actuators 9904-206, -207) 26374 (IGV Actuator, 7.00-inch Bore Models) 26188 (IGV Inlet Guide Vane Actuator) 26346 (IGV Inlet Guide Vane Actuator with Junction Box) 26528 (LMS100 IGV Actuator) 26490 (Woodward M-Spring Actuator with Fisher CV500 Valve) 26491 (Woodward M-Spring Actuator with Triple Offset Butterfly Valve) 26213 (3055 VSV Actuators) 40124 (3055 VSV Servo Valve & VSV Actuators 9902-222, 223) 40110 (VSV Variable Stator Vane Control)	
Liquid Shutoff Valve	40135		
Liquid Shutoff Valve 25	40169	40148	
LQ Series Liquid Fuel Metering Valve	40174	26087 (LQ3 Valve Actuator Assembly) 26161 (LQ25 Valve Actuator Assembly) 26475 (LQ25 Valve Actuator Assembly) 26162 (LQ25T and LQ Bypass Valve Actuator Assemblies) 26476 (LQ25T and LQ Bypass Valve Actuator Assemblies)	
LQ6 Liquid Fuel Valve with On-board Driver	03288	26207 26515	51372 (VPC Firmware Update)
LQ6T & LQ6 Bypass Valve Actuator Assemblies		26512	
LQ25T Liquid Fuel Metering Valve	40179	26162 (LQ25T and LQ Bypass Valve Actuator Assemblies) 26476 (LQ25T and LQ Bypass Valve Actuator Assemblies) 40175 (GS3/LQ Valve Driver, LQ3/LQ25 Liquid Fuel Valve Assy) 26159 (EM/LQ Digital Driver)	

SonicFlo Gas Valves, Electric	03287	26177	
SonicFlo Gas Valves, Hydraulically Actuated	03285	26094	51299 (GFCV O-ring Field Replacement)
		26231 (electric trip)	51280 (Nameplate Replacement)
		26298 (intrinsically safe components)	51279 (Servo Valve & Orifice Plate Repl.)
		26286 (high recovery design/1.5" stroke)	
		26400 (high temperature)	
		26486 (high temperature/dual trip)	
		26413 (high temperature/electric trip)	
		26384 (syngas/electric trip)	
		26419 (LESV Large Electric Sonic Valve)	
		26465 (LESV Large Electric Sonic Valve Characterized Version for DLE Apps)	
SmartIFS Integrated Fuel Systems for Industrial Gas Turbines	03309		
SPC Servo Position Controller	03254	26236 (8200-224/-225/-226)	51322 (Upgrading DRFDs to SPCs)
Swift Gas Metering System	03252	26363	
Swift ES Gas Metering System		26496	
		26350 (Swift Safety Shutoff Valves)	
Other Valves		26203 (180HT Valve)	
	03376	26329 (DVP Digital Valve Positioner)	
		40142 (DLE Valve Warnings, Calibration, & Installation)	
		26305 (EGMV Electric Gas Metering Valve)	
		04145 (Electronic Rail Valve)	
		26306 (ELMV, EWMV, ELBV Electric Metering & Bypass Valves)	
		26062 (Fuel Distribution Valve)	
		26285 (HCU Hydraulic Control Unit 9902-415/ 9902-416)	
		26416 (HLBV Hydraulic Liquid Bypass Valve 9904-1282)	
		26206 (HPI Hybrid Position Indicator for Fuel Oil Bypass Control Valve)	
		91380 (LFV Liquid Fuel Valves)	
		26088 (Liquid Bypass and Stop Valves)	
		26226 (Liquid Bypass and Stop Valves with Position Indicator)	
		40134 (Liquid Fuel Shutoff Valve 9904-208)	
		45009 (Liquid Fuel Valve & TM-55 Integrating Actuator)	
		40132 (Liquid Fuel Valve and TM-55)	
		40015 (Liquid Fuel Valve w/ LVDT & Backup Limiter 9900-303)	
		40138 (Liquid Fuel Valve w/ LVDT and Solid Pist Back Up Lmtr 9900-445)	
		04020 (Overspeed Dump Valve)	
		26362 (Triple Offset Butterfly Valve)	
		26307 (USOV Universal Shutoff Valve 2" Liquid Only 9907-869)	
		26335 (USOV Universal Shutoff Valve 3" Gas or Liquid 9907-870 or sim.)	
		26504 (VBV Variable Bleed Valve)	

Miscellaneous Gas Turbine Products	Product Spec	Technical Manual	Application Note
STExcite Industrial Gas Turbine Ignition System Driver	03308	26182 (STExcite, Single Channel)	

# Power Management Controls

easYgen Product Line	Product Spec	Technical Manual	Application Note
easYgen (general)		37262 (easYgen Series Interface Protocol Description)	
easYgen-300 Genset Control	37217	37218	
easYgen-1000 (1500) Genset Control for Single Unit Operation	37180	37205 (easYgen-1000 Application, SW Version 1.0xxx) 37204 (easYgen-1000 Configuration, SW Version 1.0xxx) 37203 (easYgen-1000 Installation, SW Version 1.0xxx) 37181 (easYgen-1000 Operation, SW Version 1.0xxx) 37321 (easYgen-1000 Configuration, SW Version 2.0xxx) 37320 (easYgen-1000 Installation, SW Version 2.0xxx) 37322 (easYgen-1000 Operation, SW Version 2.0xxx) 37390 (easYgen-1000 Installation, Software Version 2.1xxx) 37391 (easYgen-1000 Configuration, Software Version 2.1xxx) 37392 (easYgen-1000 Operation, Software Version 2.1xxx) 37393 (easYgen-1000 Interface Description, Software Version 2.1xxx) 37394 (easYgen-1000 Genset Control Application Manual) 37362 (easYgen-1500, Operating Emerg. Pwr Units)	37338 (Repl. of GCP-10 w/ easYgen-1500)
easYgen-2000 Genset Control for Multiple Unit Operation	37448	37426 (SW Version 1.xxxx, Installation) 37427 (SW Version 1.xxxx, Configuration) 37428 (SW Version 1.xxxx, Operation) 37429 (SW Version 1.xxxx, Application) 37430 (SW Version 1.xxxx, Interface) 37431 (SW Version 1.xxxx, Parameter List) 37432 (Brief Operating Information)	
easYgen-3000 (3100) Genset Control for Multiple Unit Operation	37258	37399 (Brief Operating Information) 37409 (Brief Operating Information, easYgen 3100) 37226 (Application) 37223 (Installation) 37224 (Configuration) 37225 (Operaiton) 37383 (Interface Protocol Description) 37414 (easYgen-3000 Packages Genset Control Installation SW Version 1.xxxx) 37415 (easYgen-3000 Packages Genset Control Config. SW Version 1.xxxx) 37416 (easYgen-3000 Packages Genset Control Operation SW Version 1.xxxx) 37417 (easYgen-3000 Packages Genset Control Application SW Version 1.xxxx) 37418 (easYgen-3000 Packages Genset Control Interface SW Version 1.xxxx) 37420 (easYgen-3000 Parameter List) 37419 (easYgen-3100 Brief Operation Information) 37445 (easYgen-3200 Mains Real Power Measurement) 37454 (easYgen-3200 Run-up Synchronization)	
easYlite-100 CANbus Based Remote Annunciator	37279	37307	

<b>EGCP Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
EGCP-2 Engine Generator Control Package	03219	26175 (EGCP-2 Application 8406-120/121) 26181 (EGCP-2 Communications 8406-120/121) 26174 (EGCP-2 8406-120/121) 26076 (EGCP-2 Installation(8406-115/116) 26086 (EGCP-2 Operation 8406-115/116) 26099 (EGCP-2 HMI & Servlink 8406-115/116) 37407 (EGCP-2/GCP-30 Load Share Interface Module)	51199 (EGCP-2 Differences) 51201 (Setpoint Worksheet) 51244 (SW Upgr. Instr. to 8406-120E/-121F) 51270 (SW Up In to 8406-120G/121H/123C) 51209 (SW Upgr. Kit Instr. Rev A to B) 51211 (SW Upgr. Kit Instr. Rev A/B to C)
EGCP-3 LS Multi-unit Load Share Version	03300	26122 (EGCP-3 Installation) 26194 (EGCP-3 LS Operation)	51281 (8406-113 Rev K SW Changes) 51294 (8406-113 Rev L SW Changes) 51313 (8406-113 Rev N SW Changes) 51361 (8406-113 Rev R SW Changes) 51247 (Single Phase Zig Zag Application)
EGCP-3 MC Multi-unit Mains Controller Version	03301	26122 (EGCP-3 Installation) 26195 (EGCP-3 MC Operation)	51298 (8406-114 Rev H Software Changes)
Misc. EGCP-3			51215 (Operation with Auto. Transfer Switch) 51207 (Sequencing) 51224 (Complex Power Systems Solutions) 51210 (Beta Site, São Paulo, Brazil) 51213 (EGCP-3 & SPM-D on the Sea Jewel)

<b>GCP Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
GCP-10 Series Genset Control Package	03242	37129	
GCP-20 Series Genset Control Package	03243	37128	
GCP-30 Series Genset Control	03240	37240 (GCP-30 Application) 37182 (GCP-30 Engine CANbus, Option SC06) 37313 (GCP-30 Engine CANbus, Option SC06/07/08) 37238 (GCP-30 Function/Operation Software Version 4.3xxx) 37239 (GCP-30 Installation Software Version 4.3xxx) 37278 (GCP-30 Configuration Software Version 4.3xxx) 37364 (GCP-30 Installation Packages) 37365 (GCP-30 Configuration Packages) 37366 (GCP-30 Installation Rental Package) 37367 (GCP-30 Configuration Rental Package) 37382 (GCP-30 OptionSC09/SC10 Engine CANbus SW Version 4.3046) 37407 (GCP-30/EGCP-2 Load Share Interface Module)	
GCP-31 RPQ-SC09	37316		51225 (GCP-31/LS 4)
GCP-32			51258 (GCP-32 and SPM-D)

<b>MFR Product Line</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
MFR 2 Multi Function Relay Integrated Generator Protection & Control	03248	37131 (MFR 2 Options) 37355 (MFR 2 Packages)	
MFR 3 Multi Function Relay Mains & Generator Protection & Control	37166	37107	
MFR 11 Multi Function Relay Mains Protection	03244	37140 (MFR 11 Multi Function Relay) 37351 (MFR 11 Packages Protection Relay)	
MFR 12 Multi Function Relay Current Protection	03249	37141 (MFR 12 Current Protection) 37352 (MFR 12 Packages Protection Relay)	

MFR 13 Multi Function Relay Generator Protection	03245	37142 (MFR 13 Generator Protection) 37353 (MFR 13 Packages Protection Relay)
MFR 15 Multi Function Relay Generator Protection & Control	03247	37143 (MFR 14/15 Protection Relay and Control) 37354 (MFR 15 Packages Protection Relay & Control)
MFR 300 Measuring Transducer	37406	37396

**Synchronizers**

	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
ASG 410+ Synchronizing System		37130	
DSLDC Digital Synchronizer and Load Control	02006	02007	
DSM Synchronizer		85100	
MSLC Master Synchronizer and Load Control	02021	02022	
SPM-A Speed & Phase Matching Synchronizer	82383	82384	01301 (Gas Engines)
SPM-D10 Series One Breaker Synchronizer	37297	37215	
SPM-D10/YB Three Phase Synchronizer	37298	37134	
SPM-D10B/PSY		37184 (SPM-D10B/PSY4) 37231 (SPM-D10B/PSY5)	
SPM-D11 Series Load Share Synchronizer	37292	37259	
SPM-D21 Series Two Breaker Synchronizer/Load Control	37293	37249	
SYNCONpanel Transportable Remote Synchronizing Panel	37185	37187	

**Miscellaneous Power Management Products**

	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
APTL Automatic Power Transfer & Load Control	82380	82381	
D-1 Display Unit		26143	
DTSC-50 Automatic Transfer Switch Controller	37455	37441	
DTSC-200 Switchgear Control for ATS Operation	37398	37388 (DTSC-200 ATS Controller Application Manual) 37386 (DTSC-200 ATS Controller Configuration, Software Version 1.0xxx) 37385 (DTSC-200 ATS Controller Installation, Software Version 1.0xxx) 37387 (DTSC-200 ATS Controller Operation, Software Version 1.0xxx) 37389 (DTSC-200 Series Interface Description, Software Version 1.0xxx)	
ESDR 4T Current Differential Relay	03250	37137 (ESDR 4) 37138 (ESDR 4T)	
Generator Load Sensor	82314	82313	
GW 4 Gateway Interface Converter	37170	37133 (GW 4 Gateway/Interface Converter) 37360 (GW 4 Packages Gateway/Interface Converter Op. Manual SW Ver 2.0xxx)	
IKD 1 I/O Expansion Board	37171	37135	
LeoPC Software		37164 (LeoPC1 PC Program, Engineering Manual) 37146 (LeoPC1 PC Program, User Manual)	
Load Pulse Unit	82388		
Load Pulse Sensor with Turbo Boost (speed reset)	82023	82022 (Load Pulse Unit w/ Speed Reset)	51121 (Limits Freq Excursions)
Load Share Gateway (LSG)	37451	37442	
Load Sharing Module	82686	02035 (0.5-4.5 Vdc Output 9907-252) 26011 (Analog Output 9907-173) 02029 (Analog Output/CE Compliant) 26012 (PWM Output 9907-174) 02036 (PWM Output 9907-175/Caterpillar) 02031 (Load Sharing Interface Module (LSIM) 8239-082)	

		82445 (Speed/Load Sharing/Pressure Control for Generators)	
LS 4 Circuit Breaker Control & Protection	37167	37105	51222 (Military Marine)
Pow-R-Con Multi-Function Control (former Barber-Colman)		37265	
Real and Reactive Power Sensor	82011		
Real Power Sensor	02012	82350 (8272-387/-394/-480) 82048 (8272-695) 82052 (8272-781/-796/-826) 26049 (for use with 9140 RF LOCOP)	
ST 2 Lambda Controller		37108	
ST 3 Air/Fuel Ratio Control	37174	37112	
TUG 4 Temperature or Analog Input Monitoring Unit	37169	37359 (TUG 4 Packages Temp. Monitoring Unit Op. Manual SW Ver 1.6xx/2.6xx) 37303 (TUG 4 Temperature Monitoring Unit)	
UMT 1 Measuring Transducer	37168	37139 (UMT 1 Measuring Transducer v1.9xx, 2.0xx, 2.1xx, 3.0xx, 3.1xx) 37356 (UMT 1 Packages Measuring Transducer v2.1xx)	
Other		37207 (Disable AMF Function via DI, Option D01) 37372 (DPC Direct Configuration Cable 5417-557) 37200 (Engine RS-232 Interface, Option SB) 37286 (Preglow Control, Option D08) 37117 (SYA 410 Paralleling Relay)	51306 (proconX GCP-MG Comm. Gateway)

# General Information

## Reference Manuals

- 25070 (Electronic Control Installation Guide)
- 25071 (Oils for Hydraulic Controls)
- 25075 (Commercial Preserv Pkg for Storage of Mech-Hydr Controls)
- 25179 (Glossary of Control Names)
- 25225 (Woodward Worldwide Directory)
- 26260 (Governing Fundamentals and Power Management)
- 26300 (Non-Restricted Publications Index)
- 26452 (Woodward Diesel Systems Publications [former Cheltenham, UK])
- 26455 (Customer Publications Cross-Reference)
- 82510 (Magnetic Pickups & Proximity Switches for Electronic Controls)
- 82715 (Guide for Handling & Protection: Electronic Controls, PCBs, Modules)

## Reference Application Notes & Product Specs

- 01302 (Speed Droop & Power Generation)
- 03362 (RER Services Overview)
- 25014 (Gas Engine Governing)
- 50500 (Simplified Unloading Scheme for Electric Governors)
- 50511 (Prediction of Phase Angle at Breaker Closure)
- 50516 (Governor Linkage for Butterfly Throttle Valves)
- 50532 (EMI Control in Electronic Governing Systems)
- 51214 (Work versus Torque)
- 51228 (Gas Turbine Products)
- 51229 (Steam Turbine Products)
- 83402 (PID Control)
- 83403 (Industrial Steam Turbine Control)
- 83408 (PLCs for Turbine Control Systems)

## General Catalogs

- 36300 (MotoTron Control Solutions Product Guide)
- 37404 (Venturi Mixers Product Catalog)
- 37405 (Fuel Injection Products for Aftermarket)
- 52122 (Product Line Catalog)
- 52132 (Solenoid Components for Control Systems Catalog)

## General Brochures

- 37400 (easYgen-series)
- 37401 (easYgen-3000 flyer)
- 51196 (12 V Systems for Mobile Spark-Ignited Engines (25–125 hp) Leaflet)
- 51197 (12 V Systems for Stationary Spark-Ignited Engines (15–100 kW) Leaflet)
- 51373 (Ecopetrol/Air Liquide/Silkeborg/GE AEP Retrofit)
- 51374 (British Sugar Retrofit)
- 52110 (Integrated Turbine and Compressor Control)
- 52116 (Fueling Progress/Diesel & Gas Engine Solutions)
- 52117 (Fueling Progress/Power Management Solutions)
- 52118 (Fueling Progress/Gas & Steam Turbine)
- 52120 (NetSim Control Simulation)
- 52131 (Computer Based Training Module/Basic Governing & Control Theory)
- 52135 (Diesel Fuel Injection Solutions/Introduction)
- 52136 (Diesel Fuel Injection Solutions/Technology Review)
- 52137 (Certified R&O Turbine Valve Services Leaflet)
- 52138 (Mobile and Industrial Equipment Controls Brochure/8.5x11")
- 52140 (Mobile and Industrial Equipment Controls Brochure [52138 in A4 size])
- 52147 (Elk Basin Steam Turbine Retrofit [W-MB])

## PM Motor Control

- APM Motor Control
- Voltage Converter, Adj. 24 Vdc PM Motor

## Product Spec

- 82044
- 82499

## Technical Manual

## Application Note

<b>Software</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Control Assistant	03201	26015 (Getting Started)	
GAP Graphical Application Programmer	03377 (03216)	80018 (GAP Getting Started) 26290 (GAP/MULTIPROG Help) 26100 (Computer Based Training/GAP)	51260 (Installing Run-time License) 51261 (KW Software for GAP) 51321 (SAE J1939 CAN/GAP)
Monitor GAP	03306		
NetSim Basic Control Simulation Tool	03292		51250 (Visual C++ Installation)
NetSim Closed Loop Control Simulation Tool	03293		
OpView Operator Interface for 505/505E/5009	85014	80019 (OpFamily Software Installation Guide)	
SLE Sequence Logic Editor	03296		
ToolKit Custom HMI Software	03366		
Watch Window Standard	03202		
Watch Window Professional/Watch Window II Professional	03220		
Other Software		26421 (Integrated Steam Turbine & Compressor Control) 26336 (Woodward VxWorks RTOS Software Tools/MicroNet Plus & Atlas-II)	

<b>Test Stands/Test Equipment/Board Checkers</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Test Stand, 5 hp Electric Drive	03380	26540 (8909-560)	
Test Stand, 3 & 5 hp Electric Drive	25806	25405 (8909-094, Basic Electric Drive) 25801 (Conversion 8959-045, Air to Electric) 25094 (T-96046 Maintenance) 25805 (8909-051 & 8909-053) 54044 (Installation to WGC Electric)	
Other Test Equipment		55008 (Test Box T-94911, Actuator Centering Box) 55036 (Test Device T-86986, PG Gov., Test. & Calibr. of LVDT Fdback Devices on) 55012 (Test Set T-95959, 2301 Speed Loop) 55016 (Test Set T-96571, 2301 Speed Loop Test Set with Load Sensor) 55028 (Test Set T-99331, EPG Electric Actuator, Speed Loop) 55037 (Test Set, 400 Closed Loop, to test 9900-323, 413 and A9900-413) 82012 (Test Set, Hand-Held Frequency Counter/Generator 8909-509) 01504 (Test Tool T87444, RVDT Setup & Polarity Checking) 55021 (Tester 8909-041, EG Actuator) 55011 (Tester, 2301/2301A/EGM Port. Spd Loop w/ Load Sensor 8909-555)	

<b>Training</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
Computer Based Training		26100 (GAP) 26101 (Basic Governing and Control Theory)	

<b>Other Products/Information</b>	<b>Product Spec</b>	<b>Technical Manual</b>	<b>Application Note</b>
700 Series Controls		85185 (700 Digital Speed Control) 85177 (701 Digital Speed Control) 02814 (701A Digital Speed Control) 02703 (702 Locomotive Control) 02714 (721 ABLs Hardware) 02770 (721 ABLs Hardware, CE Mark Versions) 26018 (721 Digital Control Overspeed Switch 9907-718)	01304 (Dynamic Adjustment Procedure)

		26105 (721 Digital Control Overspeed Switch 9907-733)	
		02707 (721 Digital Speed Control)	
		02813 (721 Digital Speed Control 9905-834/840)	
		26004 (721 Digital Speed Control 9907-717)	
2301 Frequency Sensor		82503	
43095 Pneumatic Load Balance		36625	
Power Source, Dual	85116	85115	
Power Supply, 24 Vdc	82013	82452	
Power Supply, 28 Vdc		82372	
Process and Import/Export Control	02013	82010	
Solenoid Products		36712 (Bosch RQV-K Governor Shutdown Kit with 1752ES Solenoid)	
		36706 (Bosch RSV Governor Shutdown Kit with 1751 & 1751ES Solenoids)	
		36708 (Zexel Nippondenso RSV Governor Shutdown Kit with 1752ES Solenoid)	
		I-SAL-004 (ElectroForce Dual Coil Solenoids Installation Instructions)	
		SE-3024 (ElectroForce Externally Switched Dual Coil Solenoids)	
		36541 (ElectroForce Solenoid Troubleshooting Guide)	
		36542 (ElectroForce Solenoid Wiring Instructions)	
		36568 (Two-Element Speed Switches Installation, Adjustment & Service Instructions)	
		36570 (Overspeed Switches Installation, Adjustment & Service Instructions)	
		36707 (Kit 1A, SD Sys. for Kubota 62.2 mm Eng. w/ 1753 & 1753ES Solenoids)	
		36709 (Kit 3A, SD Sys. for Kubota 70 & 82 mm Eng. w/ 1751 & 1751ES Solenoids)	
		36722 (Mini-Gen Signal Generator Installation Instructions)	
		36723 (Underspeed Switches Installation & Adjustment Instructions)	
		36724 (Three-Element Speed Switches Installation Instructions)	
Stepper Motor Driver, Speed Adjusting	02034	26223	
ST-125		04169 (standard)	51285 (Replacing ST-125 with L-Series)
		04185 (w/ Aux Input)	
TQ-125		04146 (standard)	51272 (Replacing TQ-125 with L-Series)
		04187 (enhanced)	01300 (Linkage Install. and Adjustment)
Miscellaneous		55043 (Accum. Assy, and Charging Assy)	
		36044 (Air/Fuel Ratio Control)	
		55032 (Ambient Air-Temperature Sensor)	
		36684 (Booster Servomotor)	
		45005 (CDP Sensor Assembly/Temp Biased)	
		36049 (Control Sys for Controllable Pitch Marine Propellers)	
		26019 (Deltec VM7956 Burner)	
		82540 (Dual Fuel Control)	
		55077 (Duplex Filter Assembly)	
		82429 (Export Controls)	
		85108 (Frequency Control, Digital)	
		82477 (Fuel Limiter)	
		82346 (Fuel Limiter 8272-107)	
		37421 (Gasket Kits for IP54 or Type 12 Enclosures information sheet)	
		82434 (Generator Loading Control)	
		36641 (Governor Oil Heat Exchanger, Remote & Integral Types)	
		03508 (Groschopp Speed Adjusting (Synchronizing) Motor)	
		26047 (High Density Discrete Input/Output Field Termination Module, HD DIO FTM)	
		55035 (Hydraulic Support Package, Dual-Pump)	

82017 (Input Power Selector Switch)  
55106 (Installation Instructions for Compression Type Hydraulic Fittings)  
82030 (Isolated Signal Converter)  
36052 (Mag Speed Pickup for PG, UG-8, UG-40 Governors)  
37717 (Motor Operated Potentiometer)  
82461 (Paralleling Phase Switch)  
26356 (PCMCIA Installation)  
36645 (Pneumatic Load Sharing Transmitter)  
36613 (Pneumatic Transmitter)  
82359 (Ramp Generator & Signal Converter)  
82018 (Real and Reactive Pwr Sensor)  
82439 (Remote Speed Reference Unit)  
04104 (RPFV Rail Pressure Fuel Valve)  
82716 (Signal Converter)  
26080 (Smart Pressure Transducer)  
85555 (Smart Pressure Transducer)  
82514 (Speed Setting Pots used on 2301, 2500, & 8290 Systems)  
82310 (Speed Switch & Integrated Speed Switch)  
82039 (Synchronous Motor Operated Potentiometer)  
54106 (Tachometer Assembly Installation)

51344 (New UEGO Sensor Controller)

### Other Application Notes

36584 (8270-0644 Controller used with DC10502 actuator)  
51324 (8270-1096 Controller for 15 kW 50/60 Hz Military Genset)  
51259 (Advance Flow Signal Filtering)  
83405 (Adv Software Sys Lets Control Engineers Concentrate on Control)  
51241 (ATEX Compliance Overview)  
83400 (Boiler Feedwater Control)  
51332 (EasySync USB Serial Adapter)  
51223 (Energy Control Technologies on the Queen Mary 2)  
51341 (FBUS vs Modbus)  
51204 (Grounding and Shielding Termination)  
51295 (Highland Technology V375 VME 4-channel Speed Card)  
55104 (Hydraulic Fluid Analysis Kit)  
51268 (Impact of Recursion Rate and Loop Delay on Effective Control)  
51329 (ITCC Decoupling Algorithm Improvement)  
51121 (Load Pulse Unit Limits Freq Excursions)  
51049 (Load Sensor Wiring For Single Phase Generators)  
50517 (Oil Supply Sys for Sm Gvs & Act, Recommended Engine)  
51269 (Re-greasing Procedure for LELA Actuator)  
50524 (Use of CTs to Measure Unbalanced Single-Ph. Low-Volt. Loads)

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