



[Knowledgebase](#) > [Power Management](#) > [easYgen-3000](#) > [Wiring deltas of easYgen-3400/3500-P1/P2 versus easYgen-3400XT/3500XT-P1/P2](#)

Wiring deltas of easYgen-3400/3500-P1/P2 versus easYgen-3400XT/3500XT-P1/P2

Justin Schneider - 2026-07-27 - [easYgen-3000](#)



Wiring deltas of

easYgen-3400/3500/P1/P2 versus 3400XT/3500XT/P1/P2

Why switching to easYgen-3500XT P2?



easYgen-3400-P1/P2-3500/P1-P2

many different part numbers like

8440-1934, -1935, -1936, -1937, -1945 and more

easYgen-3400XT-P1/P2, 3500XT-P1/P2

part numbers

P/N 8440-2084, -2085, -2087, -2088

<https://easygen.us/legacy-product-replacement/>

Mechanical dimensions of front panel mounted easYgen-3500XT are same like easYgen-3500. Mounting space for easYgen-3400XT is same and new control is not as high as old easYgen-3400. New easYgen-3000XT controls provide same easYgen-3000 Modbus and CANopen Protocols, so that there is no need to touch upper PLC or PMS Systems.

It is as well possible to mix old and new controls within application. Load share protocols are as well same. <https://support.easygen.org/en/kb/articles/can-i-loadshare-different-easygen-2000-3000-xtcontrols> Check

Check out as well our FAQ Database answering a lot of your daily easYgen-3000XT related questions <https://support.easygen.org/en/kb>

All easYgen-3000XT product specs, manuals, configuration files, drawings, STP 3D Models, XLS Modbus protocol and more you can get here <https://wss.woodward.com/manuals/PGC/Forms/AllItems.aspx> -2 - First board of easYgen-3400/3500 and 3400XT/3500XT is same like in easYgen-3100/3200 and 3100/3200XT, only difference is a third additional CANopen CAN 3 port and additional 2 Ethernet Ports

First board of easYgen-3400/3500 and 3400XT/3500XT is same like in easYgen-3100/3200 and 3100/3200XT, only difference is a third additional CANopen CAN 3 port and additional 2 Ethernet Ports.

AC Voltage Sensing inputs:

MAINS VOLTAGE							
L1 120Vac 480Vac		L2 120Vac 480Vac		L3 120Vac 480Vac		N 120Vac 480Vac	
21	22	23	24	25	26	27	28

BUSBAR VOLTAGE			
L1 120Vac 480Vac		L2/N 120Vac 480Vac	
37	38	39	40

GENERATOR VOLTAGE							
L1 120Vac 480Vac		L2 120Vac 480Vac		L3 120Vac 480Vac		N 120Vac 480Vac	
29	30	31	32	33	34	35	36

Mains Voltage AC 120 V 480 V ph-ph							
NC L1		NC L2		NC L3		NC N	
21	22	23	24	25	26	27	28

Busbar Voltage AC 120 V 480 V ph-ph			
NC L1		NC L2/N	
37	38	39	40

Generator Voltage AC 120 V 480 V ph-ph							
NC L1		NC L2		NC L3		NC N	
29	30	31	32	33	34	35	36

In old easYgen-3000 there are separate terminals for 120VAC and for 480VAC voltage sensing.

In easYgen-3400-XT/3500XT there is only a wide range voltage sensing input covering 120-690 VAC

AC current sensing:

MAINS CURRENT (OR GROUND C.)		GENERATOR CURRENT					
L1 s2 s1•		L1 s2 s1•		L2 s2 s1•		L3 s2 s1•	
01	02	03	04	05	06	07	08

Mains Gnd Current AC 1 A 5 A		Generator Current AC 1 A 5 A					
L1 s2 s1•		L1 s2 s1•		L2 s2 s1•		L3 s2 s1•	
1	2	3	4	5	6	7	8

Old easYgen-3000 line had part numbers for ../1A or ../5A.

easYgen-3000XT can be used for ../1A or ../5A current sensing

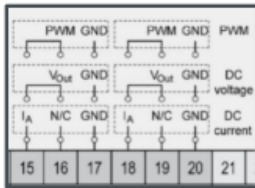
Analog Inputs:

ANALOG INPUTS 0 to 500 Ohm 0/4 to 20 mA					
AI 01 - +		AI 02 - +		AI 03 - +	
09	10	11	12	13	14

Analog Inputs 0 to 2 kOhm 0/4 to 20 mA 0 to 1 V						
AI 01 - +		AI 02 - +		AI 03 - +		Engine Ground
9	10	11	12	13	14	15

In old easYgen-3000 resistive senders up to 500Ohm and 0/4-20mA were supported. In 3000XT resistive inputs were increased to 2000Ohm and 0-1VDC senders are possible as well.

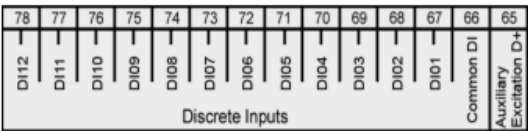
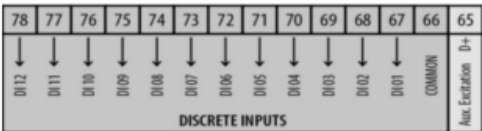
Analog Outputs:



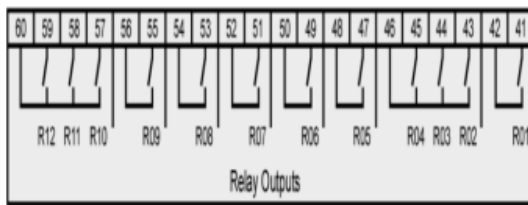
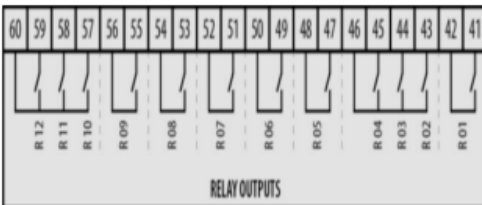
Analog Outputs					
± 10 Vdc ± 20 mA PWM					
Speed			Voltage		
AO 01			AO 02		
+	-	NC	+	-	
16	17	18	19	20	

In old easYgen-3000 controls a short link was required to convert current signal into voltage signal. In 3000XT this is done internally, so easYgen-3000's terminal 15 is used in 3000XT for engine ground

Digital Inputs:



Digital Outputs:



MPU Magnetic Pickup:



Power Supply:

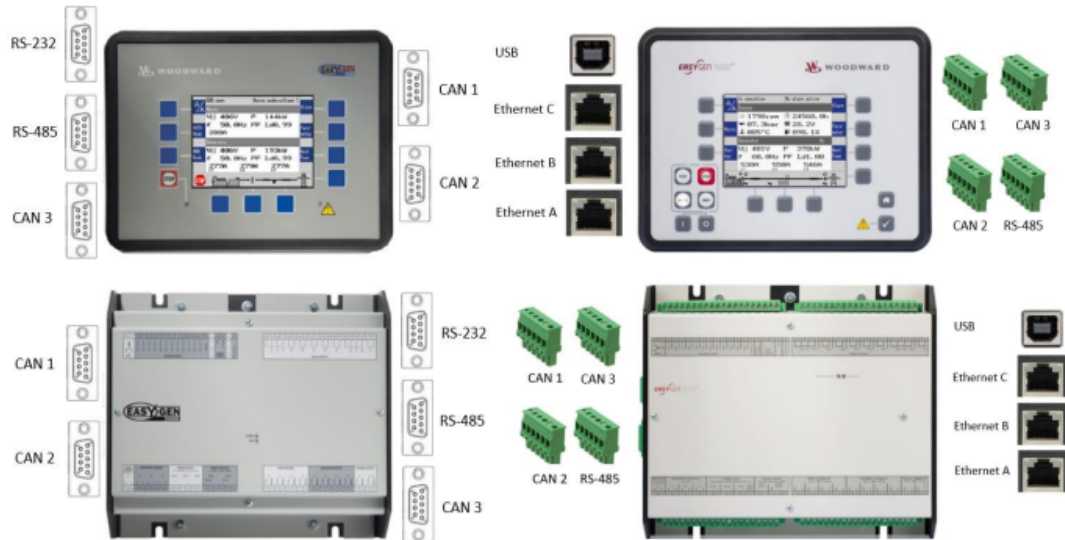
64	63	62	61
0 Vdc	12/24 Vdc	Engine Ground	*
POWER SUPPLY			

64	63	62	61
-	+	NC	*
Power Supply 12/24 Vdc			

* pin 61
easYgen-3100: No connection
easYgen-3200: Protective earth

* pin 61
easYgen-3100XT-P1: No connection
easYgen-3200XT-P1: Protective earth

Communication Interfaces:



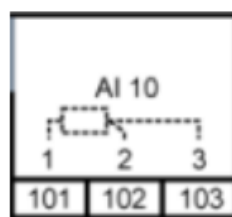
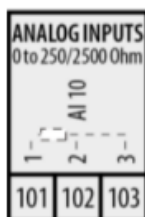
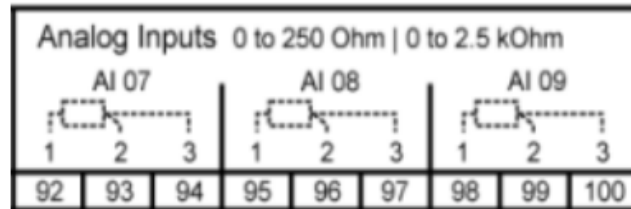
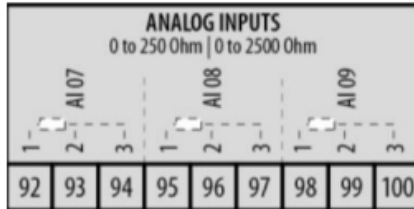
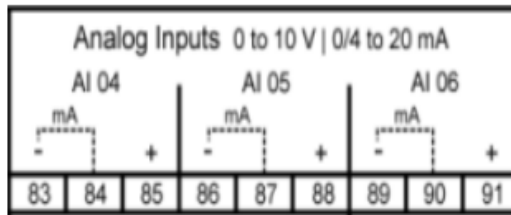
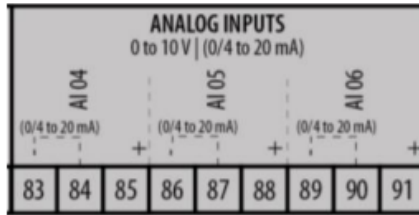
Old easYgen-3000 had D-sub sockets. RS232 port is used for Toolkit configuration. In easYgen-3000XT RS232 port was replaced by a USB 2.0 service port socket. In easYgen-3000XT D-sub sockets are replaced by terminals.

P2 second motherboard

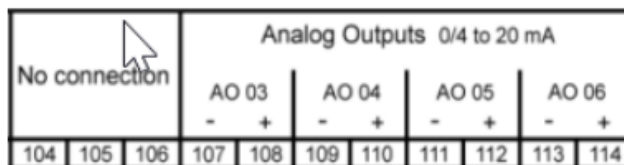
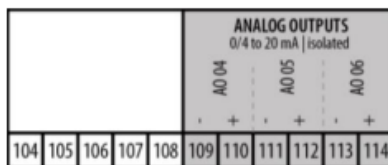
easYgen-3400/3500-P2 and easYgen-3400XT/3500XT-P2 Packages have an additional second motherboard above first main motherboard.

P2 Packages have mainly additional digital/analog I/Os and transistor pulse outputs for kWh and kVArh counters. In easYgen-3400XT-P2 and 3500XT-P2 there is an additional 0/4-20mA output and a 3rd phase of Busbar voltage sensing.

Analog Inputs:

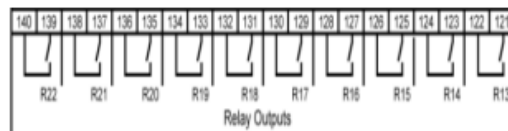
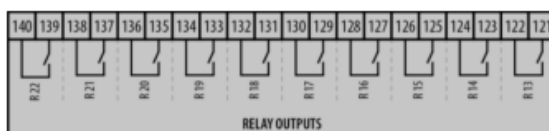


Analog Outputs:



easYgen-3400XT-P2 and 3500XT-P2 has one additional 0/4-20mA Output at terminal 107-108.

Digital Outputs:

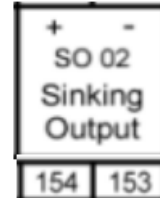
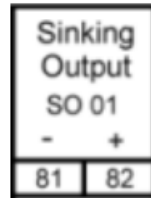
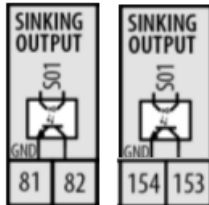


Digital Inputs:

152	151	150	149	148	147	146	145	144	143	142	141
COMMON	DI 23	DI 22	DI 21	DI 20	DI 19	DI 18	DI 17	DI 16	DI 15	DI 14	DI 13
DISCRETE INPUTS											

152	151	150	149	148	147	146	145	144	143	142	141
Common DI	DI23	DI22	DI21	DI20	DI19	DI18	DI17	DI16	DI15	DI14	DI13
Discrete Inputs											

Sinking Outputs:



Terminals not used in easYgen-3400/3500

No connection				
104	105	106	107	108

No connection			AO 03	
			- +	
104	105	106	107	108

easYgen-3400XT-P2 and easYgen-3500XT-P2 has one additional Analog Output at terminal 107-108.

No connection					
115	116	117	118	119	120

Busbar Voltage AC					
120 V 480 V 690 V ph-ph					
NC	NC	NC	L3	NC	N
115	116	117	118	119	120

easYgen-3400XT-P2 and easYgen-3500XT-P2 has 3rd phase of busbar voltage sensing, which can be used for rotation check

160	159	158	157	156	155
No connection					

160	159	158	157	156	155
No connection					