

<b>Motor/Engine:</b>	MAN E 0836 LE302
<b>Leistung/Power:</b>	110 kW @ 1500 min <sup>-1</sup>
<b>Zyl/Cylinders:</b>	R6
<b>Venturi:</b>	GM 140
<b>Gas:</b>	Natural
<b>Lambda:</b>	1,65
<b>Gas:</b>	Biogas 50% CH <sub>4</sub>
<b>Lambda:</b>	1,49 (@ 60% CH <sub>4</sub> )

Pos.	Qty.	Description	Item	HZN
<b>1.1</b>		<b>Speed/ Load Control PANDAROS</b>		
	1	Controller PANDAROS	DC 3.6-19	622-00-063-00
	1	Actuator Throttle Valve	StG 3	552-00-001-00
	1	Actuator Cable	10m	620-81-281-9005
	1	Pickup Cable	10m	620-81-248-5005
	1	Lever arm	RH 2040-01	512-80-001-00
	1	Pickup 5/8" - 18 UNF-2A	IA 12-76	600-00-006-02
<b>2.2</b>		<b>GM E-LES SMC Positioner</b>		
		<b>For Natural Gas use:</b>		
	1	Gas mixer Housing	GM 140-01	463-80-000-02
	1	Venturi Insert Natural Gas	VE-140-0701-36-K16-2,7	463-83-706-27
	1	Adapter GM200 to GM140		464-19-016-00
	1	Mounting Plate Rp 1 1/2"	MP 140 / MP 200	463-19-025-02
	1	Electronically controlled MAS E-LES 30.3 SMC		472-00-024-00
	2	Mounting Plate Rp 1 1/2"	MP 100-01	462-19-002-02
	1	Cable harness (Input 4-20mA, 0-5V, PWM, Feedback, Ref, Stop, Error) 10 m		490-81-012-00
		<b>For Biogas use:</b>		
	1	Gas mixer Housing	GM 140-01	463-80-000-02
	1	Venturi Insert Biogas* 50%CH <sub>4</sub>	VE-140-0701-36-K16-3,9	463-83-706-39
	1	Mounting plate Rp 2"	MP 140 / MP 200	463-19-025-00
	1	Adapter GM200 to GM140		464-19-016-00
	1	Electronically controlled MAS E-LES 50 SMC		472-00-021-00
	1	Cable harness (Input 4-20mA, 0-5V, PWM, Feedback, Ref, Stop, Error) 10 m		490-81-012-00

\*note: For the correct dimension of the venturi insert the gas data must be known. Please fill out the order information and send this to the head office. <http://www.heinzmann.de/en/engine-and-turbine-management/system-solutions/gas-engine-management>

<b>2.3</b>		<b>AFR-Control KRONOS 20 (Optional)</b>		
	1	Controller Closed Loop	KRONOS 20-01 CL	620-00-118-01
	1	Combined Pressure/ Temp.sensor		600-00-082-00
	1	Cable Harness Sensor	10m	600-81-051-00
	1	Pick up isolator *)	PUI-01	300-00-175-00
		or		
	1	Pickup 5/8" - 18 UNF-2A *)	IA 12-76	600-00-006-02
	1	Cable Harness Pickup *)	10 m	620-81-047-10
		*) If PANDAROS DC XX.6-19 is used, alternatively, engine speed can be read via HZM-CAN. In this case, please order 620-00-118-01 with software <b>Kronos20_ac002XX_CL_Power_HZMCAN_AC_DC_GC.dwn</b>		

Pos.	Qty.	Description	Item	HZN
<b>2.4</b>		<b>AFR-Control KRONOS 30 (alternative)</b>		
	1	Control System closed loop for GMCU 30/42	KRONOS 30	620-00-202-00
	1	ELEKTRA 30	GMCU-30-FC	473-00-030-10
	1	Cable harness Elektra 30		473-81-017-00
	1	Combined Pressure/ Temp.sensor		600-00-082-00
	1	Cable Harness Sensor		600-81-051-00
	1	Pick up isolator or	PUI-01	300-00-175-00
	1	Pickup 5/8" - 18 UNF-2A	IA 12-76	600-00-006-02
	1	Cable Harness Pickup	10 m	620-81-047-10
	1	Gas mixer Housing	GM 200-100	464-80-000-00
	1	Venturi Insert *)	VE-200-1001-36-K22-5,8	464-83-107-58
	1	Mounting plate Rp 2" *) for gases between 50% CH4 - 100% CH4 (biogas - natural gas)	MP 140 / MP 200	463-19-025-00
<b>3</b>		<b>Ignition Control PHLOX II 6 Cylinder</b>		
	1	Controller PHLOX	PHLOX II IC-08	680-00-010-00
	1	Cable Harness Input or	without CAN	680-81-002-17
	1	Cable Harness Input	with CAN	680-81-002-18
	1	Pickup camshaft	HIA-M12-76	600-00-140-00
	1	Ignition Rail 6 cyl. with cable harness, mounting set and ignition coils grey		Z00-21-060-00
	6	Ignition lead w ring connector for M6		Z00-19-036-00
<b>4</b>		<b>Knock control system ARIADNE 6 Cylinder</b>		
	1	Knock controller	KC 01-IP 00	620-00-137-06
	6	Knocksensor	KS 1-01	010-80-022-00
	6	Connecting Cable Knock Sensor		600-81-082-00
	1	Pickup camshaft *)	HIA-M12-76	600-00-140-00
	1	Cable for Pickup HIA S3 / M12 *)	10 m	620-81-177-00

\*note: Pickup may be shared with the ignition system by using a splitter. Pickup or splitter not necessary in combination with Heinzmann ignition system PHLOX.