

Motor/Engine:	MAN E3262 LE202 / LE212
Leistung/Power:	540 kW @ 1500min ⁻¹
Zyl/Cylinders:	V12
Venturi:	GM 200/125 GMA 100
Gas:	Natural (LE202)
Lambda:	1,68
Gas:	Biogas 50% CH ₄ (LE212)
Lambda:	1,55

Pos.	Qty.	Description	Item	HZN
1		Speed/ Load Control PANDAROS 2080		
	1	Controller PANDAROS	DC 2080.6-19	624-00-064-00
	1	Actuator Throttle Valve	StG 2080.21-SV	514-00-009-00
	1	Cable Harness Actuator	10m	620-81-256-6005
	1	Cable Harness Pickup	10m	620-81-248-6005
	1	Pickup 5/8" - 18 UNF-2A	IA 12-76	600-00-006-02
	1	Miniature coupling	ø10H7 / SAE1/2-36	510-81-000-01
	1	Console for StG2080 to MAN E3262		454-19-029-00
	1	Miniature coupling	ø12H7 / SAE1/2-36	452-81-000-00
2.2		GM E-LES SMC Positioner		
		For Natural Gas use:		
	1	Gas mixer Housing	GM 200-116/125	464-80-000-01
	1	Venturi Insert Natural Gas*	VE-200-1161-24-S12-6,4	464-83-112-64
	1	Mounting plate Rp 2"	MP 200	463-19-025-00
	1	Electronically controlled MAS E-LES 50.3 SMC		472-00-021-00
	1	Cable harness (Input 4-20mA, 0-5V, PWM, Feedback, Ref, Stop, Error) 10 m		490-81-012-00
		For Biogas use:		
	1	Gas mixer Housing	GM 200-116/125	464-80-000-01
	1	Venturi Insert Biogas* 50%CH ₄	VE-200-1161-24-S22-9,5	464-83-114-95
	1	Mounting plate Rp 3"	MP 200	464-19-002-00
	1	Electronically controlled MAS E-LES 80.3 SMC		472-00-022-00
	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		
2.3		AFR-Control KRONOS 20 (Optional)		
	1	Controller Closed Loop *)	KRONOS 20-01 CL	620-00-118-01
	1	Combined Pressure/ Temp.sensor *)		600-00-082-00
	1	Adaptor for pressure sensor 600-00-082-00		600-19-083-00
	1	Cable Harness Sensor *)		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 a MAN datalogger is installed on the engine, MAT, MAP and engine speed can be alternatively read via SAE J1939. Therefore only the KRONOS 20 control unit is required, please order 620-00-118-01 in combination with software Kronos20_ac0082XX_CL_Power_SAEJ1939.dwn		
2.4		AFR-Control KRONOS 30 (alternative)		
	1	Control System closed loop for GMCU 30/42	KRONOS 30	620-00-202-00
	1	ELEKTRA 42	GMCU-42-FC	473-00-042-10
	1	Cable harness Elektra 42		473-81-017-00
	1	Combined Pressure/ Temp.sensor		600-00-082-00
	1	Adaptor for pressure sensor 600-00-082-00		600-19-083-00
	1	Cable Harness Sensor		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
	1	Gas mixer Housing	GM 200-0116	464-80-000-01
	1	Venturi Insert *)	VE-200-1251-24-O-11,5	464-20-121-115
	1	Mounting plate Rp 2"	MP 140 / MP 200	463-19-025-00
		*) for gases between 50% CH ₄ - 100% CH ₄ (biogas - natural gas)		

Pos.	Qty.	Description	Item	HZN
3		Ignition Control PHLOX II 12 Cylinder		
	1	Controller PHLOX	PHLOX II IC-12	680-00-010-01
	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 MAN E3262 12 cyl. with cable harness, mounting set and ignition coils grey; left		Z00-21-050-00
	1	Ignition Rail MAN E3262 12 cyl. with cable harness, mounting set and ignition coils grey; right		Z00-21-051-00
	12	Spark plug connector w/ ring connector for Bosch MR3DII360 M18		Z00-19-052-00
4		Knock control system ARIADNE 12 Cylinder		
	1	Knock controller	KC 01-IP 00	620-00-137-12
	4	Knocksensor *)	KS 4-K1	010-80-097-00
	4	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: Knock sensors are potentially already installed on the engine by MAN, please check! Sensor cables will fit to originally engine mounted sensors as well.

**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. Knock sensors are typically pre-installed on the engine