

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11549071
Catalog # : 20012ET3G447T-W22

Frame	: 445/7T	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 200 HP (150 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 237 A	Protection degree	: IP55
L. R. Amperes	: 1492 A	Cooling method	: IC411 - TEFC
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 94.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1188 rpm	Noise level ²	: 69.0 dB(A)
Slip	: 1.00 %	Starting method	: Direct On Line
Rated torque	: 884 ft.lb	Approx. weight ³	: 2493 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 145 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.5	95.0	95.4	95.8	Max. traction	: 5325 lb
Power Factor	0.43	0.68	0.79	0.83	Max. compression	: 7817 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
4.7	4.0	3.6	2.4	1.7	1.2	0.8

	Drive end	Non drive end
Bearing type	: 6319 C3	: 6316 C3
Sealing	: WSeal	: WSeal
Lubrication interval	: 13000 h	: 16000 h
Lubricant amount	: 45 g	: 34 g
Lubricant type	: Mobil Polyrex EM	

Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

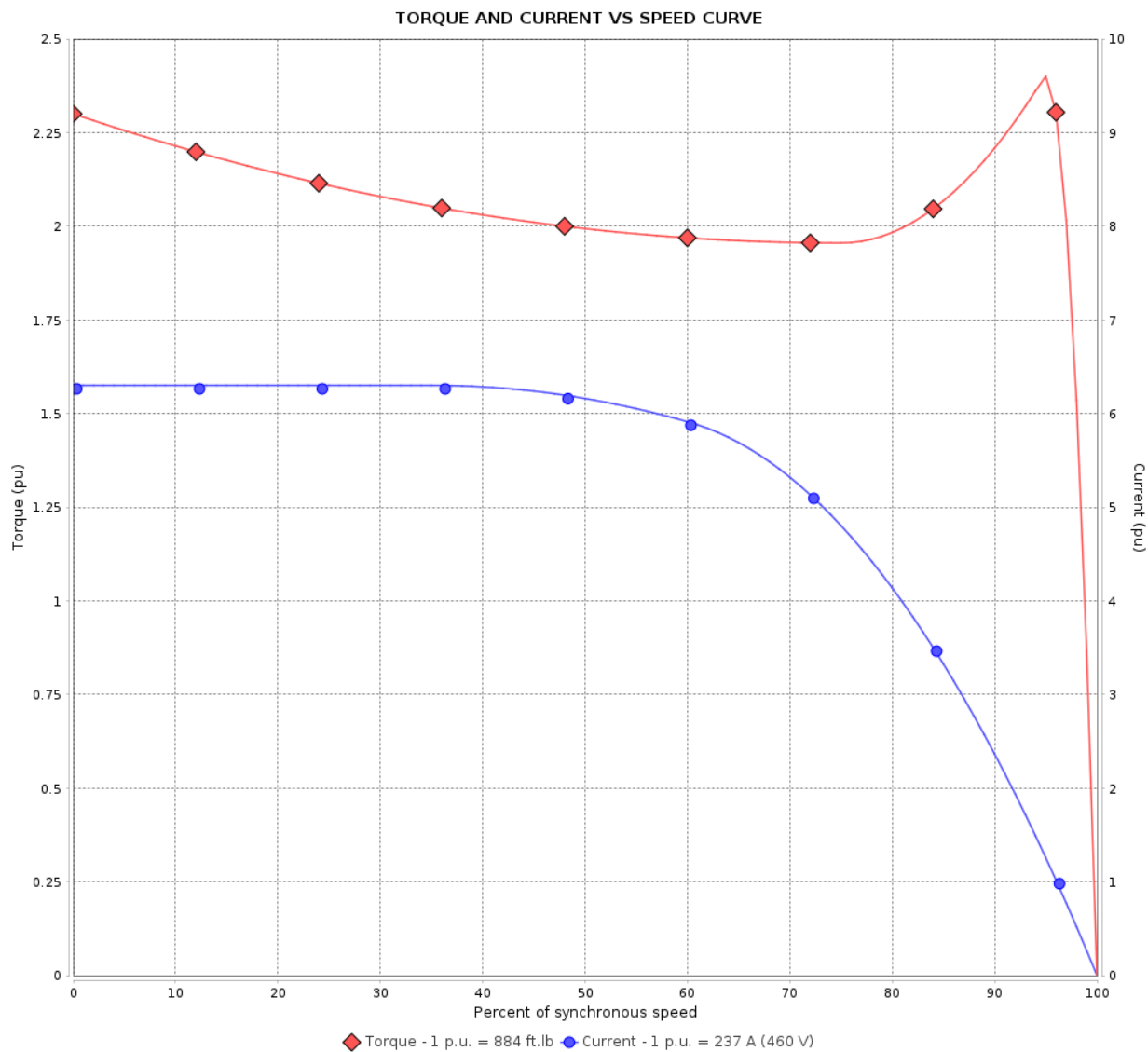


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11549071

Catalog # : 20012ET3G447T-W22



Performance : 460 V 60 Hz 6P

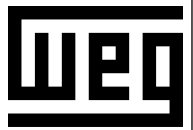
Rated current	: 237 A	Moment of inertia (J)	: 145 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 884 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1188 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

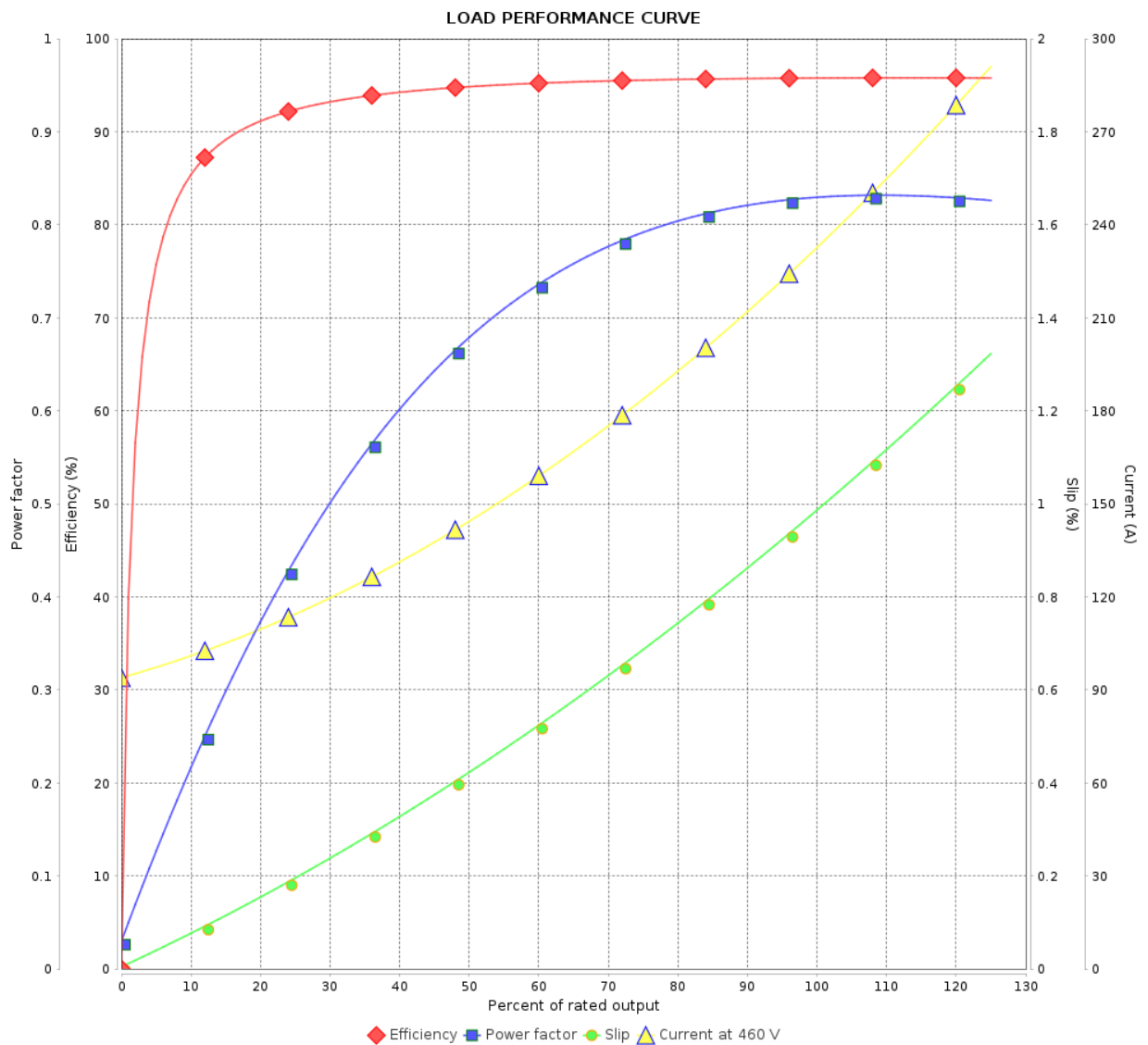


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11549071

Catalog # : 20012ET3G447T-W22



Performance : 460 V 60 Hz 6P

Rated current : 237 A
LRC : 6.3
Rated torque : 884 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 240 %
Rated speed : 1188 rpm

Moment of inertia (J) : 145 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer	:		
Product line	:	W22 NEMA Premium Efficiency Three-Phase	Product code : 11549071 Catalog # : 20012ET3G447T-W22

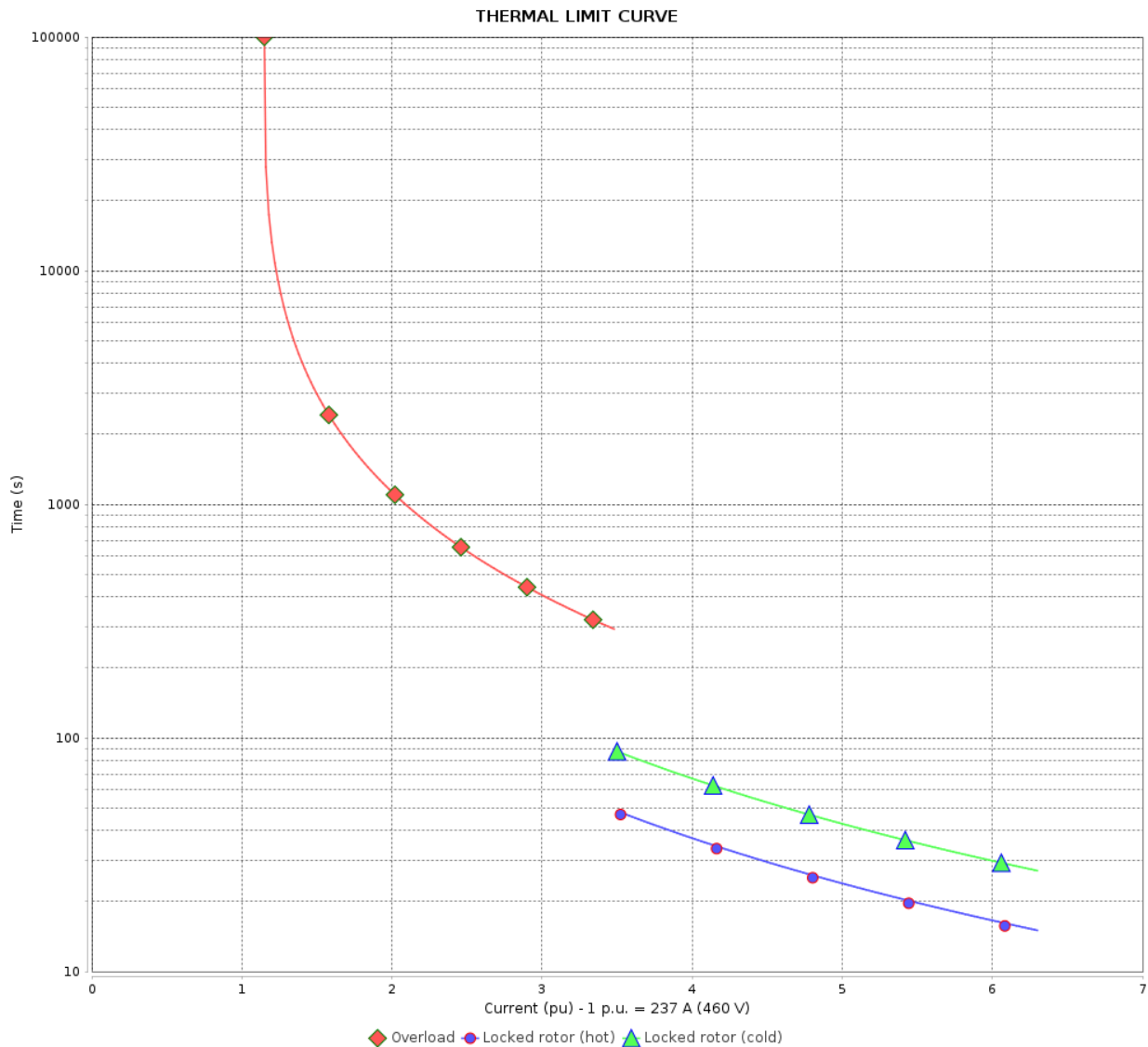
Performance		: 460 V 60 Hz 6P			
Rated current	:	237 A	Moment of inertia (J)	:	145 sq.ft.lb
LRC	:	6.3	Duty cycle	:	Cont.(S1)
Rated torque	:	884 ft.lb	Insulation class	:	F
Locked rotor torque	:	229 %	Service factor	:	1.15
Breakdown torque	:	240 %	Temperature rise	:	80 K
Rated speed	:	1188 rpm	Design	:	B
Heating constant					
Cooling constant					
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

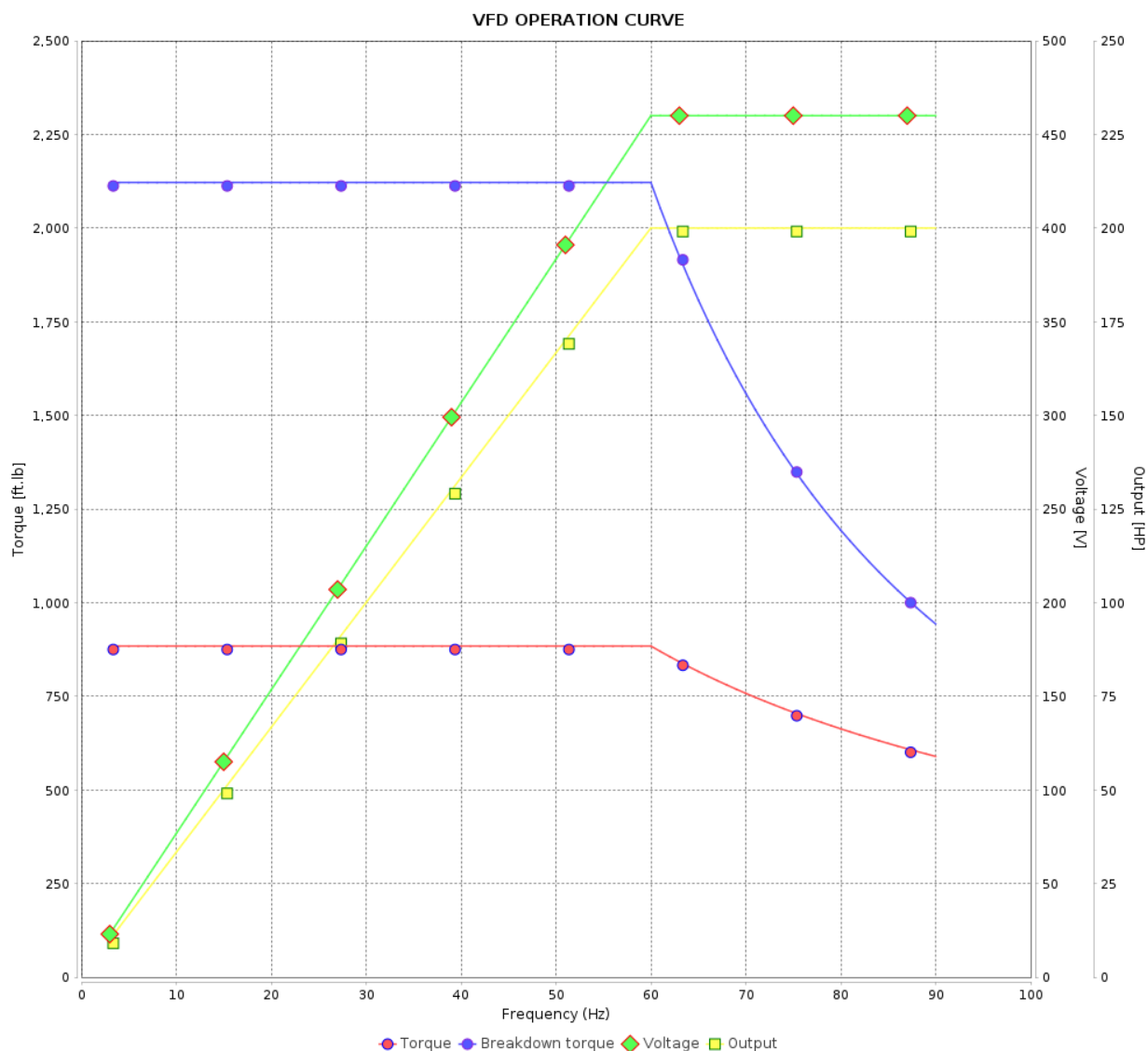


Customer :

Product line : W22 NEMA Premium Efficiency
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Product code : 11549071

Catalog # : 20012ET3G447T-W22



Performance : 460 V 60 Hz 6P

Rated current : 237 A
LRC : 6.3
Rated torque : 884 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 240 %
Rated speed : 1188 rpm

Moment of inertia (J) : 145 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
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MADE IN MEXICO

11549071


NEMA
Premium
W22

MODEL 20012ET3G447T-W22

 Inverter Duty Motor
 Severe Duty

PH3 60Hz Fr. 445/7T 1000m.a.s.l. IP55 TEFC 2453lb

V 460

A 237

HP 200

kW 150

SF 1.15

SFA 273

RPM 1185

PF 0.83

AMB 40°C

INS cl. F DT80K NEMA NOM EFF 95.8%

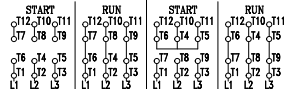
DUTY CONT.

DES B Code G


 FOR SAFE AREA
 Mod. TE1BFOXON
 CC029A

 Class I, Div 2, Gr A, B, C and D - T3
 Class I, Zone 2, IIC - T3
 Class II, Div 2, Gr F and G - T3C
 For use on PWM: Gr. A, B, C, D and F,
 VT 1000:1, CT 20:1, 1.00SF - T3

PART-WINDING



→ 6319-C3 (45g)

→ 6316-C3 (34g)



MOBIL POLYREX EM (13000h)

