

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 13658095

Frame	: 56HC	Cooling method	: IC01 - ODP
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 13.3 kg
Design	: A	Moment of inertia (J)	: 0.0038 kgm <sup>2</sup>

Output [HP]	1.5	1.5	1.5
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	4.60/2.30	5.18/2.59	4.89/2.59
L. R. Amperes [A]	31.7/15.9	28.5/14.2	29.3/15.5
LRC [A]	6.9x(Code K)	5.5x(Code G)	6.0x(Code J)
No load current [A]	3.20/1.60	3.00/1.50	3.96/2.10
Rated speed [RPM]	1745	1420	1435
Slip [%]	3.06	5.33	4.33
Rated torque [kgfm]	0.624	0.767	0.759
Locked rotor torque [%]	250	170	210
Breakdown torque [%]	280	210	250
Service factor		1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	18s (cold) 10s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%		
	50%	75.5	71.5
	75%	78.5	76.1
	100%	80.0	76.8
Power Factor	25%		
	50%	0.51	0.51
	75%	0.65	0.66
	100%	0.75	0.77

Bearing type	: Drive end	Non drive end	Foundation loads
	: 6204 ZZ	6202 ZZ	
Sealing	: Without	Without	Max. traction : 54 kgf
	: Bearing Seal	Bearing Seal	
Lubrication interval	: -	-	Max. compression : 67 kgf
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

### Notes

USABLE @208V 5.09A SF 1.00 SFA 5.09A

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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	17/05/2022			

Page 1 / 4  
Revision

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



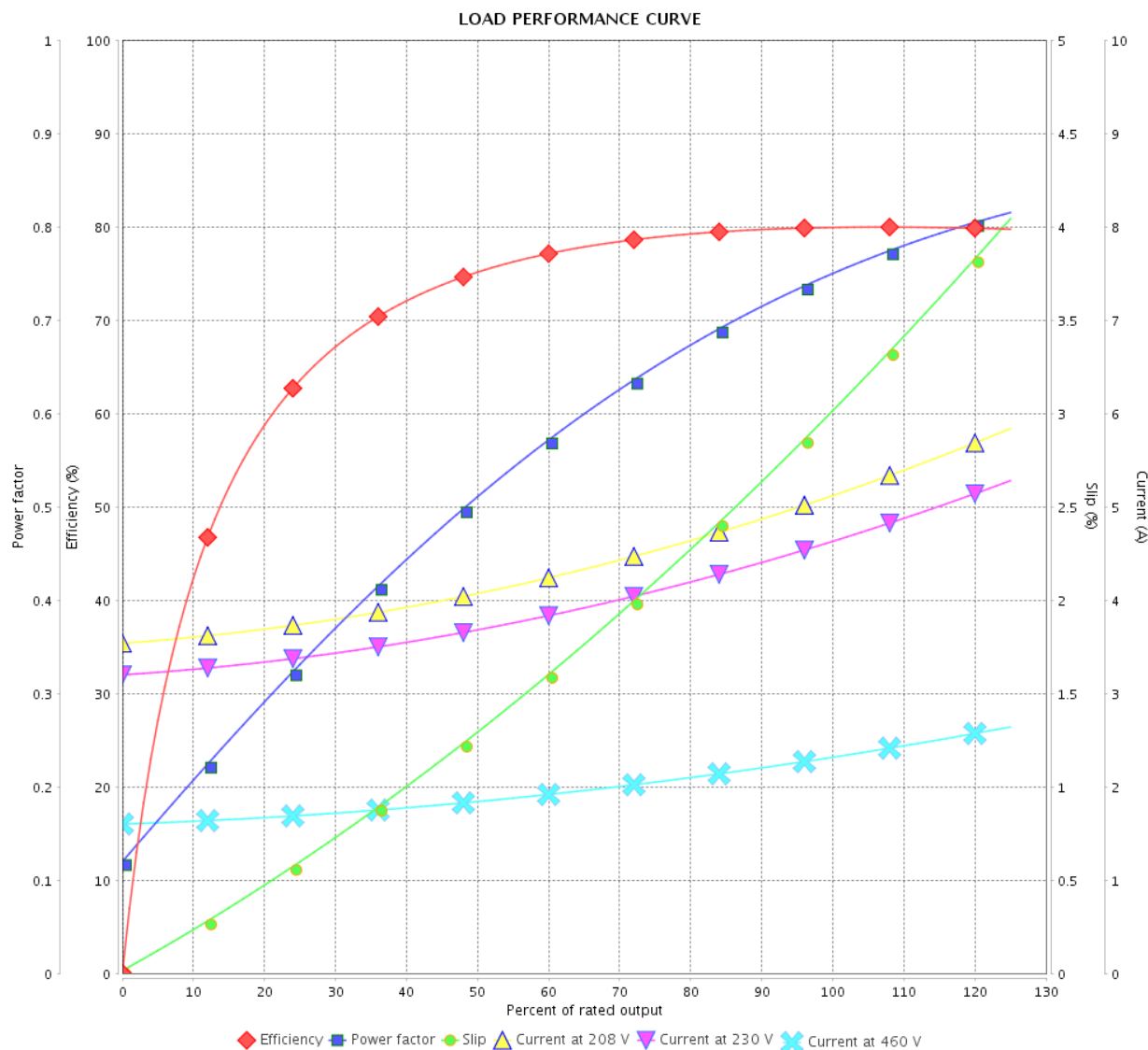
Customer :

Product line

: Standard Efficiency Three-Phase

Product code :

13658095



Performance : 230/460 V 60 Hz 4P

Rated current : 4.60/2.30 A  
 LRC : 6.9  
 Rated torque : 0.624 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 280 %  
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.0038 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : A

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				2 / 4	
Date					

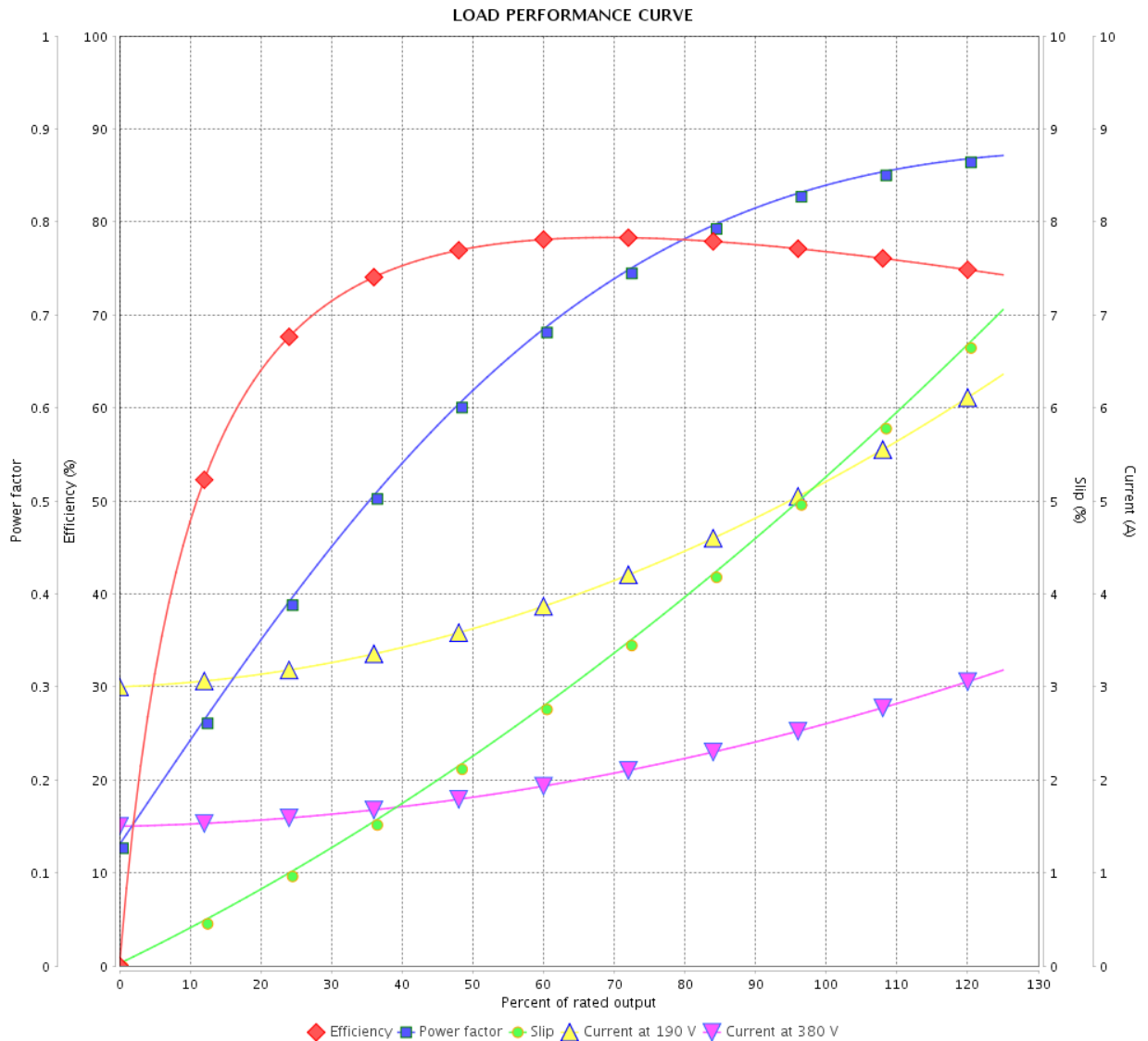
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 13658095



Performance : 190/380 V 50 Hz 4P

Rated current : 5.18/2.59 A  
 LRC : 5.5  
 Rated torque : 0.767 kgfm  
 Locked rotor torque : 170 %  
 Breakdown torque : 210 %  
 Rated speed : 1420 rpm

Moment of inertia (J) : 0.0038 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 4Revision		
Checked by				
Date	17/05/2022			

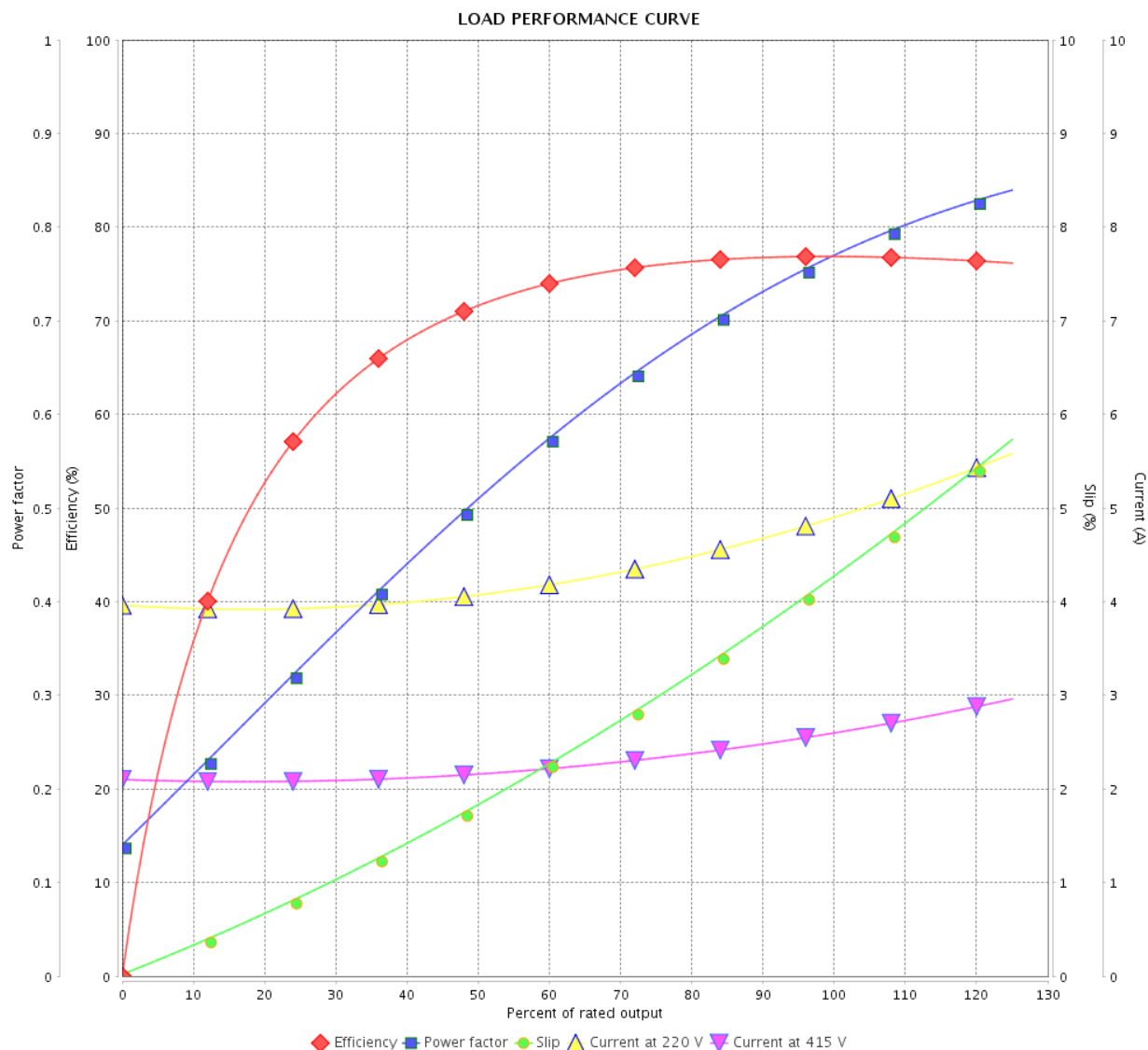
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 13658095

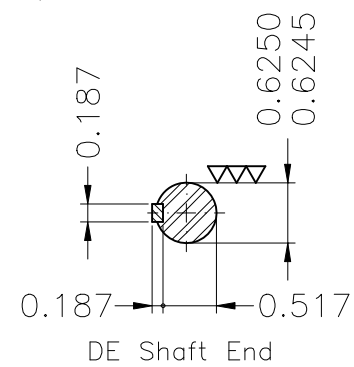
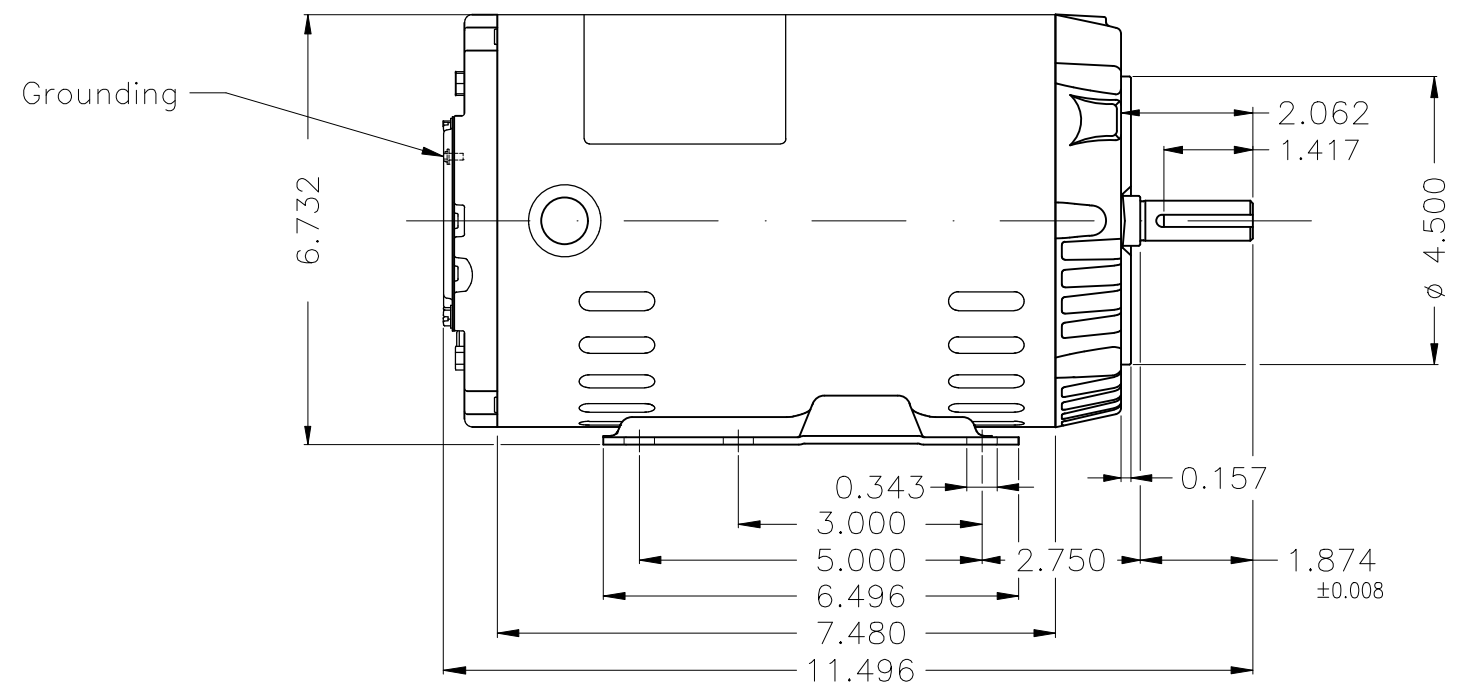
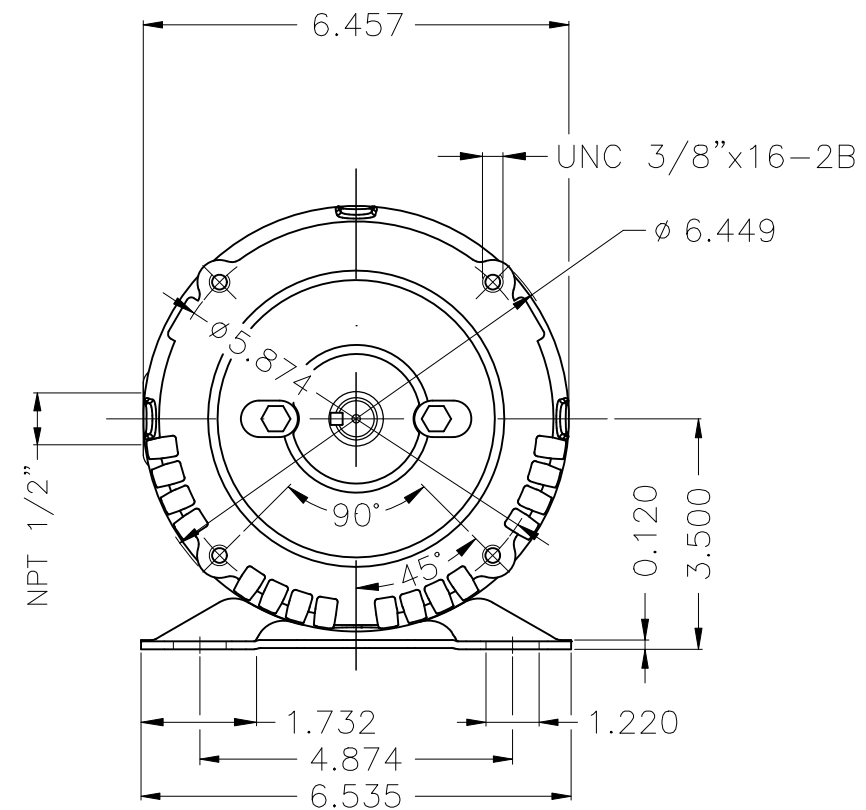




Performance : 220/415 V 50 Hz 4P

Rated current : 4.89/2.59 A  
 LRC : 6.0  
 Rated torque : 0.759 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 250 %  
 Rated speed : 1435 rpm

Moment of inertia (J) : 0.0038 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : A

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				4 / 4	
Date					



Color Munsell N 1 matte black									
Painting plan 207N									
Mounting B34D									
				HYBRISUSER					00
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR ROLLED STEEL FRAME 56HC IP21 ODP			PREVIEW WDD   00			
CHECKED									
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			