

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W22 IEEE 841 NEMA Premium Efficiency Three-Phase		Product code :	11431400
Frame	: 364/5T	Cooling method	: IC411 - TEFC		
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>	: 434 kg		
Protection degree	: IP56	Moment of inertia (J)	: 0.9798 kgm <sup>2</sup>		
Design	: B				
Output [HP]	75	75	75	75	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	87.2	106	102	98.7	
L. R. Amperes [A]	558	541	571	602	
LRC [A]	6.4x(Code G)	5.1x(Code E)	5.6x(Code F)	6.1x(Code G)	
No load current [A]	33.0	33.0	35.0	38.0	
Rated speed [RPM]	1780	1475	1475	1480	
Slip [%]	1.11	1.67	1.67	1.33	
Rated torque [kgfm]	30.6	36.9	36.9	36.8	
Locked rotor torque [%]	240	170	200	210	
Breakdown torque [%]	260	200	220	240	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	105 K	105 K	105 K	
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	
Noise level <sup>2</sup>	67.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	
Efficiency (%)	25%				
	50%	94.5	94.5	94.5	94.1
	75%	95.0	94.1	94.5	94.5
	100%	95.4	93.6	94.1	94.5
Power Factor	25%				
	50%	0.68	0.75	0.70	0.67
	75%	0.78	0.82	0.80	0.78
	100%	0.83	0.84	0.83	0.82
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	4.7	4.7	4.7	4.7
	P2 (0,5;1,0)	3.7	3.7	3.7	3.7
	P3 (0,25;1,0)	3.4	3.4	3.4	3.4
	P4 (0,9;0,5)	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.6	1.6	1.6	1.6
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.7	0.7	0.7	0.7
Bearing type	: Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads		
Sealing	: Inpro/Seal	Inpro/Seal	Max. traction	: 774 kgf	
Lubrication interval	: 12000 h	12000 h	Max. compression	: 1208 kgf	
Lubricant amount	: 27 g	27 g			
Lubricant type	: Mobil Polyrex EM				
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.			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				Page	Revision
Date	13/01/2024			1 / 6	

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		2 / 6	

# LOAD PERFORMANCE CURVE

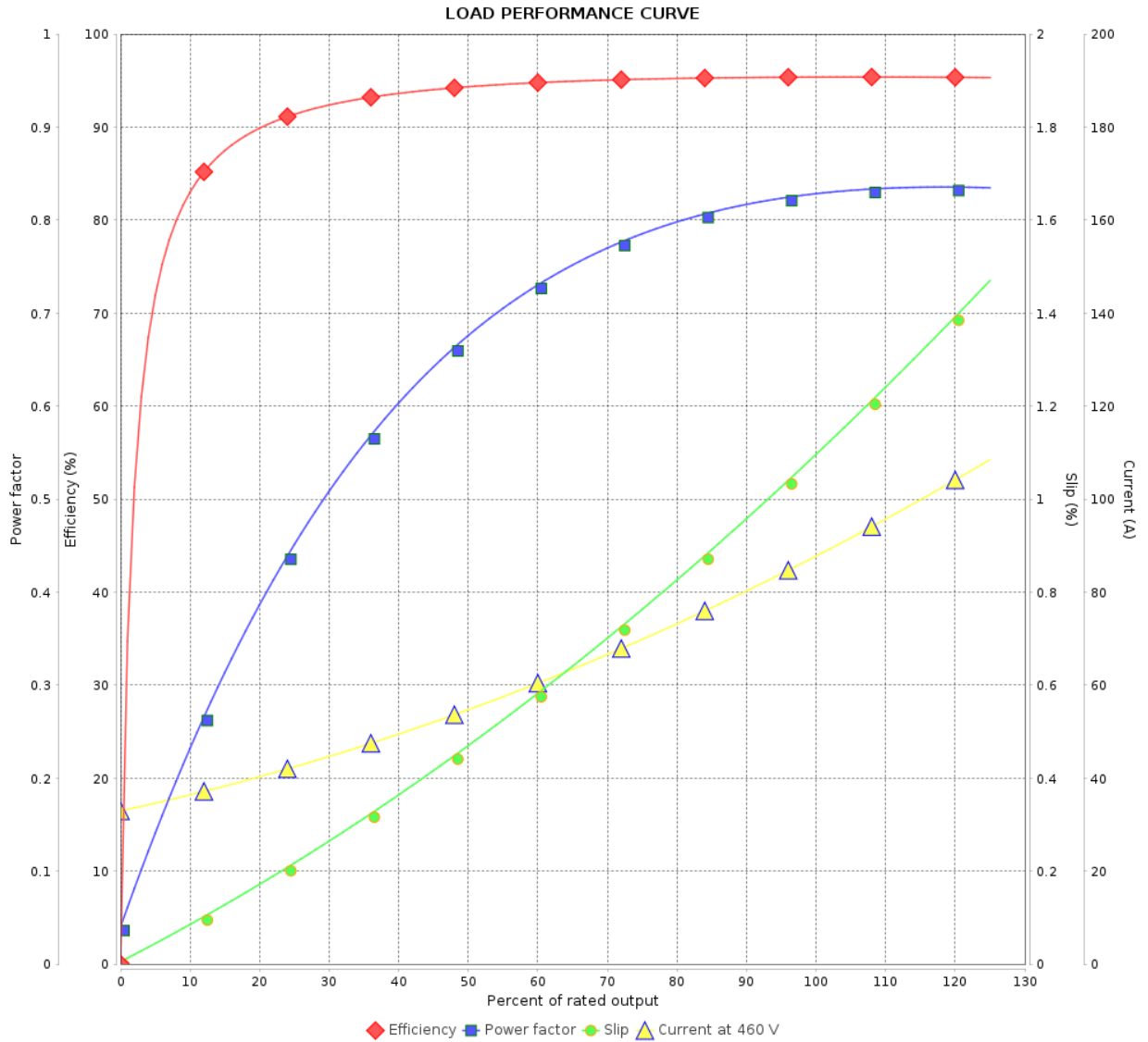
## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 IEEE 841 NEMA Premium Efficiency  
Three-Phase

Product code : 11431400



Performance : 460 V 60 Hz 4P

Rated current : 87.2 A  
 LRC : 6.4  
 Rated torque : 30.6 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 260 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.9798 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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

# LOAD PERFORMANCE CURVE

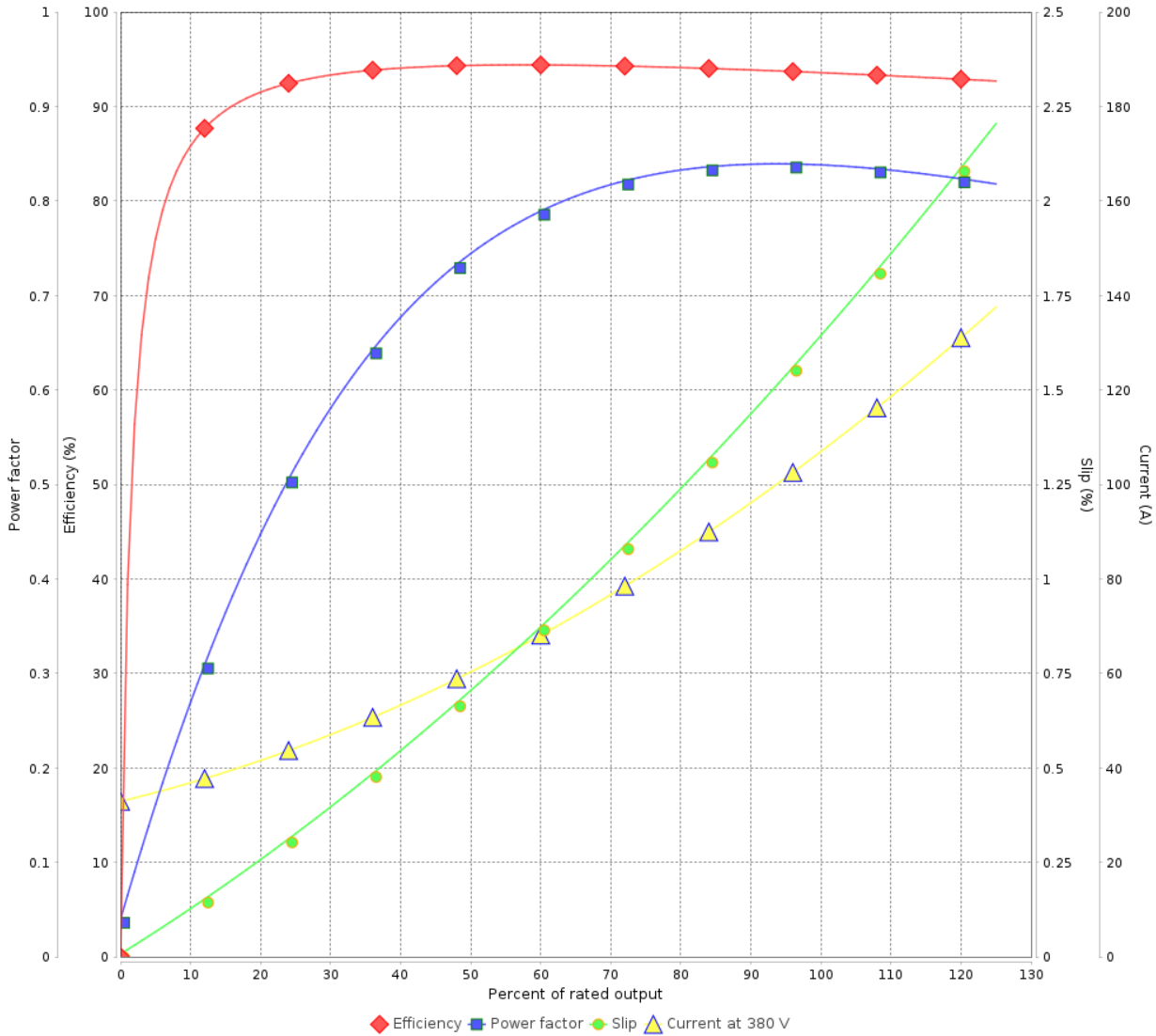
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 11431400

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 4P IE2

Rated current	: 106 A	Moment of inertia (J)	: 0.9798 kgm <sup>2</sup>
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 36.9 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 1475 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	13/01/2024			

# LOAD PERFORMANCE CURVE

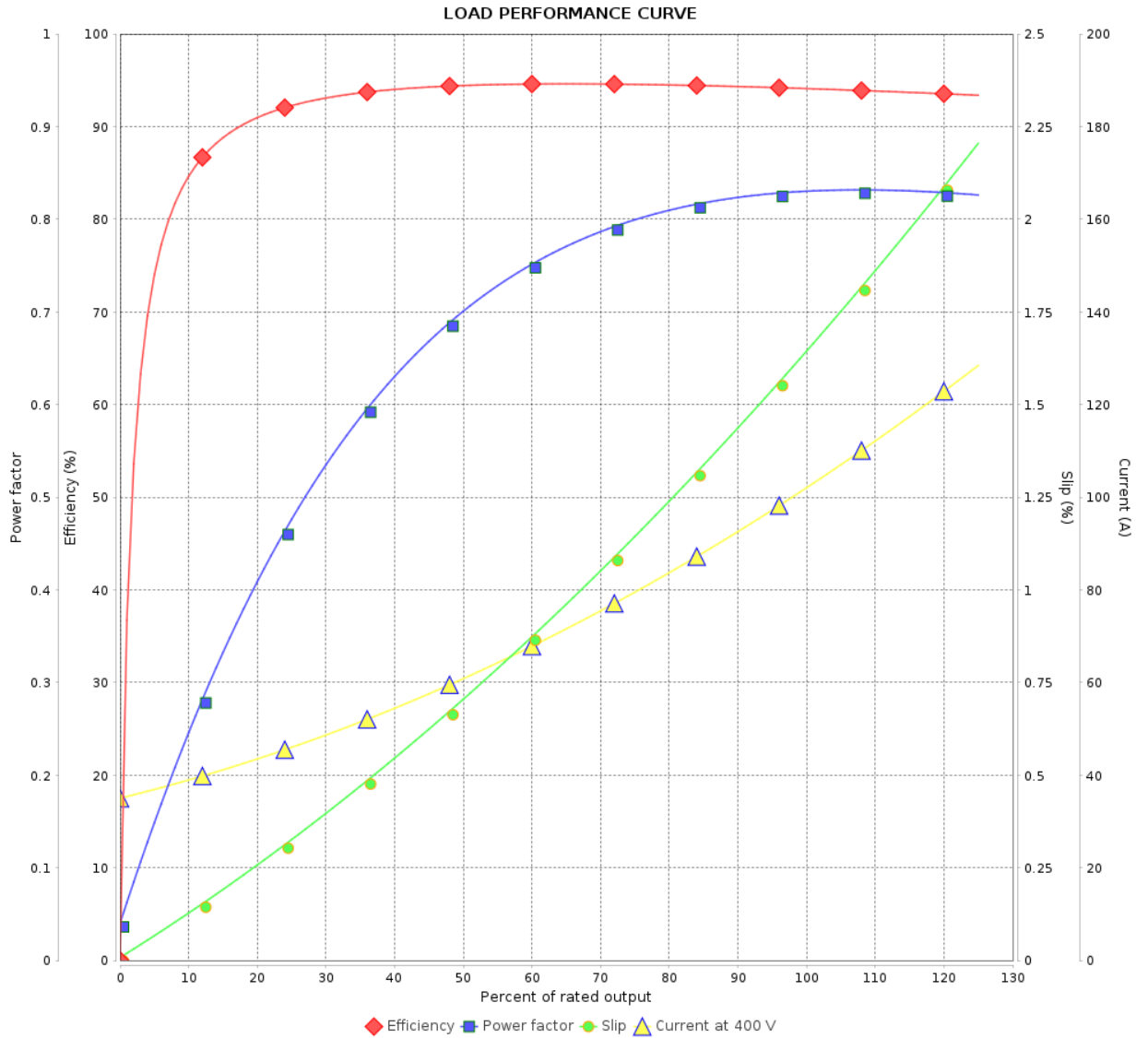
## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 IEEE 841 NEMA Premium Efficiency  
Three-Phase

Product code : 11431400



Performance : 400 V 50 Hz 4P IE2

Rated current : 102 A  
 LRC : 5.6  
 Rated torque : 36.9 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 220 %  
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.9798 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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

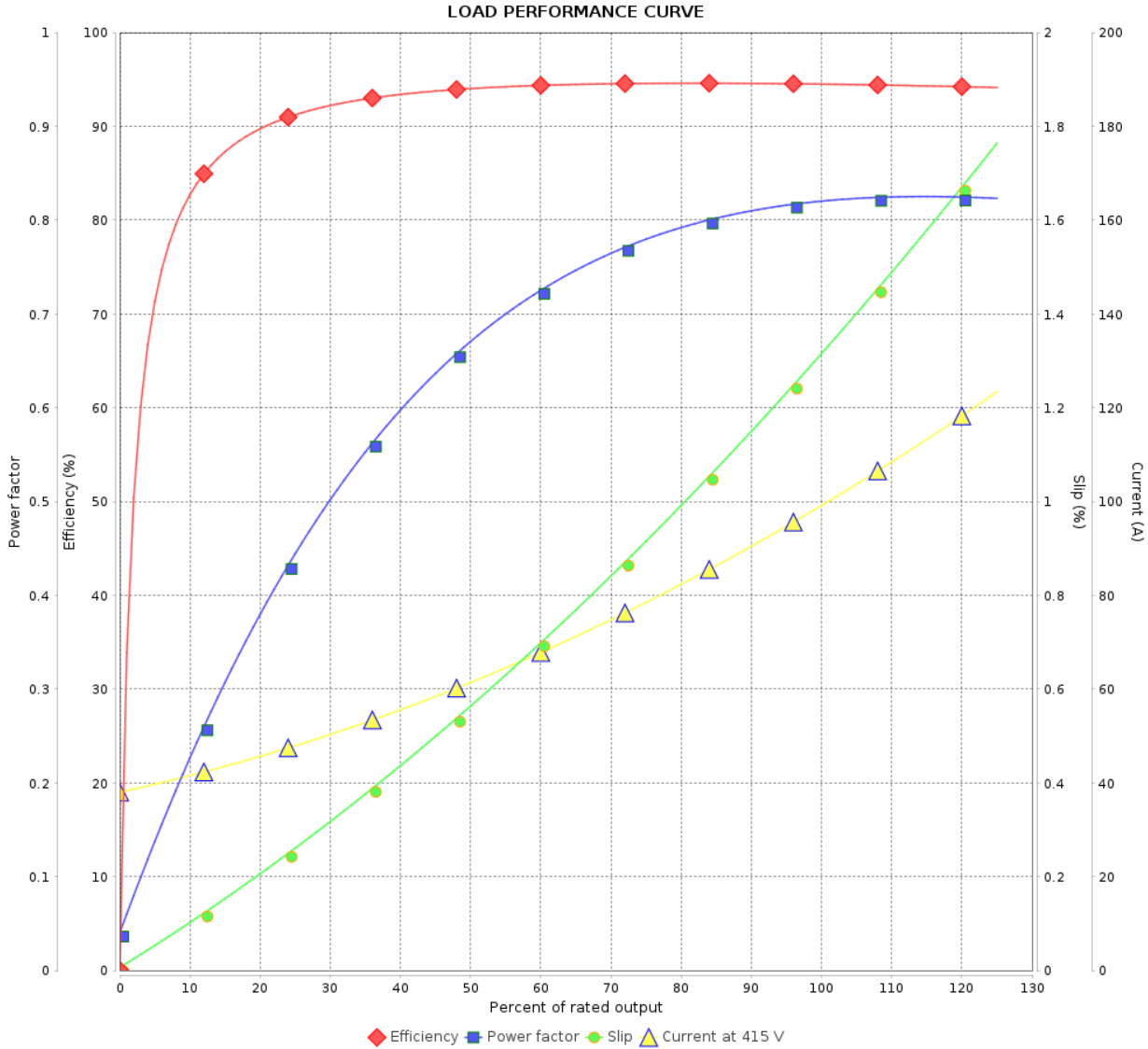
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 11431400



Performance : 415 V 50 Hz 4P IE2

Rated current	: 98.7 A	Moment of inertia (J)	: 0.9798 kgm <sup>2</sup>
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 36.8 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 1480 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	13/01/2024			