cutes
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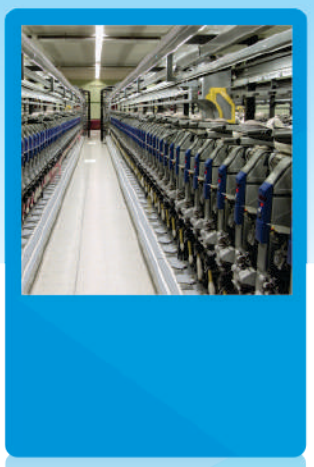
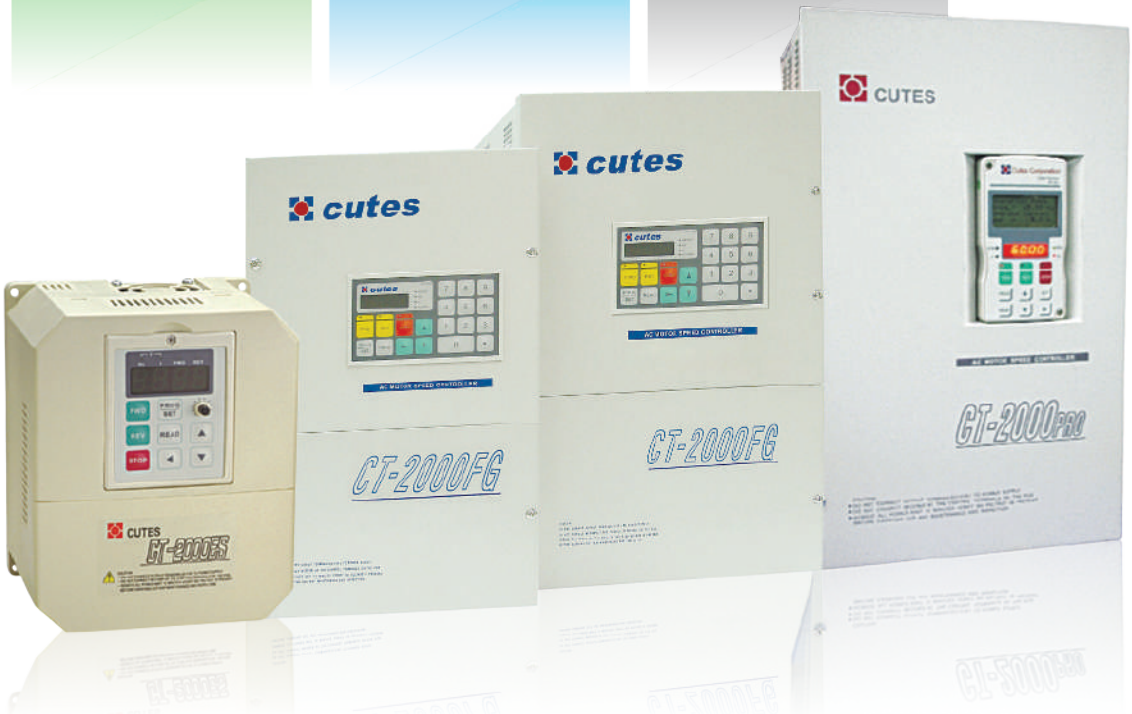
Special Model for Textile/General Application

CT-2000 PRO/FG/ES Series

The Ultimate Driving Machine





REV STP PROG SET FWD

AC MOTOR SPEED CONTROLLER

cutes

CT-2000PRO/PRO-I 200V SERIES (7.5KW~112KW)

Motor (KW)	7.5	11	15	22	30	37	45	55	75	93	112
Model CT-2000PRO-□□□	7A5	011	015	022	030	037	045	055	075	093	112
Model CT-2000PRO-i-□□□	7A5	011	015	022	030	037	045	055	075	093	112
Reted Current (A)	33	48	61	86	125	150	170	210	278	330	396
Rated Capacity (KVA)	13.1	19.1	24.3	34.3	49	60	68	84	111	131	158
Power Supply	3Φ 200~230V ±10% 50.60Hz ±5%										
Output Voltage	3 Φ 200V, 220V, 230V										
Cooling Systems	Forced air-cooling										
Weight (KG)	13	13	22	23	46	49	50	75	83	89	90

CT-2000PRO/PRO-I 400V SERIES (7.5KW~220KW)

Motor (KW)	7.5	11	15	22	25	30	37	45	55	75	93	112	130	150	188	220
Model CT-2000PRO-□□□	7A5	011	015	022	025	030	037	045	055	075	093	112	130	150	188	220
Model CT-2000PRO-i-□□□	7A5	011	015	022	025	030	037	045	055	075	093	112	130	150	188	220
Reted Current (A)	17.3	24	31	52	61	65	71	93	110	156	180	225	260	290	360	460
Rated Capacity (KVA)	13.8	19.1	24.7	41.4	47.1	51.8	56.6	74	87.6	124	143	180	207	231	286	356
Power Supply	3Φ 380~460V ±10% 50/60Hz±5%															
output Voltage	3 Φ 380V, 400V, 415V, 440V, 460V															
Cooling Systems	Forced air-cooling															
Weight (KG)	15	15	16	25	25	26	49	51	53	79	82	91	98	128	129	145

Standard Specifications

Control system	Sine P.W.M control
Frequency accuracy	Digital setting: ±0.1% analog setting:±0.5% (35°C)
Frequency resolution	Digital 0.5~100Hz → 0.01Hz 100Hz~240Hz~0.1Hz Analog setting: (setting value/1000)Hz
Frequency range	0.5~240Hz (starting frequency 0.5~30Hz)
V/F ratio	10 patterns, or any V/F pattern
Voltage compensation	0~15.0% voltage compensation, automatic voltage compensation
Accel./Decel. time	0.1~6000sec. (linear, two-step setting)
Motor braking	DB100% (2.2~3.7KW include DBR), DB20%(5.5KW and above)
DC injection braking	DC Injection Braking (setting mode, torque, time, active frequency)
Standard feature	Free run restart, jogging speed, upper/lower frequency limit setting, jump frequency setting, 8-step speed setting. Frequency increase/decrease (UP/DOWN) function, BIAS, frequency indicated output (DC0~10V), operation direction setting, forward/reverse prohibit, voltage/current limit, data lock, multi-step function, auto record when power off, 6 memory pattern of multi-step function.
Ext. input terminal	FWD/REV/STOP, frequency increase/decrease, jogging, 8-step speed selection, free run stop, reset, 2-step acceleration/deceleration time selection.
RELAY output indication	Time reach, fault, stop, acceleration, speed reach, deceleration, speed over.
Frequency setting	Digital setting by keypad or external analog signal (DC0~10V, DC4~20mA)
Operating display	7-segment LED & LCD dual display: frequency, current, voltage, setting value, function, fault status, temperature of PIM module, status of multi-step function, average speed of multi-step function, instant power, power factor, KWH, MWH.
Protective function	Low voltage, over voltage, instantaneous power failure, over voltage stall, overload, over current stall, instantaneous over current, acceleration over current, deceleration over current, overheat.
Overload function	150% for 1 min, anti-time limit function, adjustable (25~100%)
Altitude	Altitude 1,000m or lower, keep from corrosive gasses, liquid and dust.
Ambient temperature	-10°C~45°C (50°C with cover removed)
Storage temperature	-20°C~60°C
Ambient vibration	Below 0.5G
Humidity	Relative humidity between 45% and 90% (non-condensing)

CT-2000FG

For Heavy Duty Application

Characteristic:

- Motor Parameter auto-tuning, improve its efficiency
- Motor Parameter auto-tuning, provide automatic torque compensation (1Hz at torque 150% and above)
- Particular adjustable technology to reduce motor noise
- Built-in PID control, applicable for industry system and energy-saving application
- Built-in standard RS422/485 communication port, MODBUS RTU protocol
- Multi-function DI and AI interface
- 16-step speed function control setting
- Provide option card to upgrade performance
- Continuous rated current 150%x1min

400V series

Motor rating (KW)	3.7	5.5	7.5	11	15	18.5	22	25	30	37	45
Model (CT-2000FG-4)	3A7	5A5	7A5	011	015	18A5	022	025	030	037	045
Rated capacity (A)	9	13	17.3	24	31	38	52	61	65	71	93
Rated capacity (KVA)	7.1	10.4	13.8	19.1	24.7	30.2	41.4	47.1	51.8	56.6	74
Outline dimension	A1	A1	A1	A2	A2	A3	A4	A4	A4	A5	A5
Weight (kg)	9	9	9	14	14	14	23	23	23	40	46

Motor rating (KW)	55	75	93	112	131	150	187	225	262*	300*	
Model (CT-2000FG-4)	055	075	093	112	131	150	187	225	262	300	
Rated current (A)	110	156	180	225	260	290	370	460	530	610	
Rated capacity (KVA)	87.6	124	143	180	206	230	293	364	422	485	
Outline dimension	A6	A6	A7	A7	A7	A8	A9	A9	A10	A10	
Weight (kg)	50	55	65	70	93	123	123	123	*	*	
Rated input voltage	3 ϕ380~460V ±10%, 50/60Hz± 5%										
Rated output voltage	3 ϕ380~460V ±10%,										
Cooling System	Forced air-cooling										

*: Under development

Standard Specification

Control method	V/f Vector P.W.M
Frequency accuracy	Digital setting: ±0.01% Analog setting: ±0.5% (35°C)
Frequency resolution	Digital setting: 0.01Hz Analog setting: (setting value/1024)Hz
Frequency range	0.00~400.00 Hz
V/f ratio	14 patterns, or any V/f pattern
Torque compensation	Auto-tuning, provide automatic torque compensation (1 Hz at torque 150% and above)
Accel./Decel. Time	0.0~6000.0 sec (liner, two-step setting)
Braking	DC braking for all motor rating, dynamic braking for 11kw and below
Standard feature	Overload 150% x 1 min, Jogging speed, upper/lower frequency limit setting, 8-step speed setting, 16-step speed functional control setting, RS422/RS485 communication port, jump frequency setting, PID control, Multi-function DI and AI interface
Option card	Analog/Digital IO card (developing)
Frequency setting	Digital setting by keypad, Analog setting by keypad (DC 0~10V), external analog setting(DC 0~10V, 4~20mA)
Display	7-segment LED display: Frequency, voltage, current, setting value, function, operate indicator light, fault status
Protection	Phase-loss, low voltage, over voltage, overload, over current, over heat, over current stall
Overload capacity	Continuous rated current 150% x 1 min
Altitude	Indoor, altitude 1000 meter or lower
Ambient Temperature	-10°C~50°C for 11 kw and above, -10°C~45°C for 7.5kw and below
Vibration	Below 0.5G
Humidity	Relative between 45% to 90% (No condensing)

CT-2000ES series

Characteristic :

- Output frequency 0.5~240.0Hz
- Analog setting (DC0~10V) and (DC4~20mA)
- Automatic voltage compensation and slip compensation
- PWM frequency 1.5~16KHz
- 10 pattern, or any V/F pattern
- 16-step speed function control setting
- 8-step speed setting bias
- Built-in PID control
- 2-step acceleration/deceleration
- RS422/RS485 communication port, MODBUS protocol

200V series 3 phase

Motor rating (KW)	0.375*	0.75	0.75*	1.5	1.5*	2.2	2.2*	3.7	3.7*
Model CT2002ES	A37	A75	ESe-A75	1A5	ESe-1A5	2A2	ESe-2A2	3A7	ESe-3A7
Rated current (A)	2.4	4.2	4.2	7.4	7.4	11.1	11.1	18	18
Rated capacity (KVA)	0.96	1.8	1.8	2.9	2.9	4.4	4.4	7.1	7.1
Power supply	3φ200~230V ±10%, 50/60Hz± 5%								
Output voltage	3φ200V, 220V, 230V								
Cooling system	Forced air-cooling								
Weight (Kg)	2.5	2.5	2.5	2.5	2.5	3.5	3.5	3.5	3.5

*: Under development

400V series 3 phase

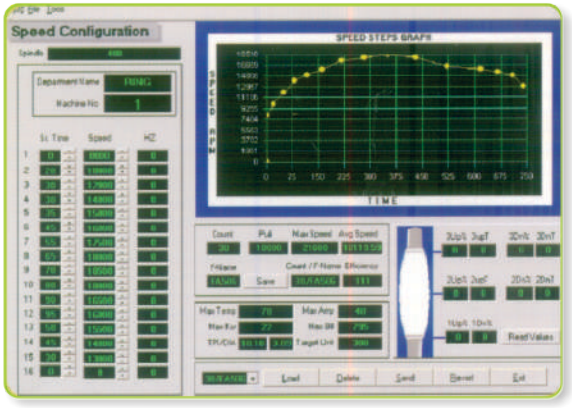
Motor rating (KW)	0.75	0.75*	1.5	1.5*	2.2	2.2*	3.7	3.7*
Model CT2004ES	A75	ESe-A75	1A5	ESe-1A5	2A2	ESe-2A2	3A7	ESe-3A7
Rated current (A)	2.2	2.2	4.0	4.0	6.2	6.2	9	9
Rated capacity (KVA)	1.7	1.7	3.2	3.2	4.9	4.9	7.1	7.1
Power supply	3φ380~460V ±10%, 50/60Hz± 5%							
Output voltage	3φ380V, 400V, 415V, 440V, 460V							
Cooling system	Forced air-cooling							
Weight (Kg)	2.5	2.5	2.5	2.5	3.5	3.5	3.5	3.5

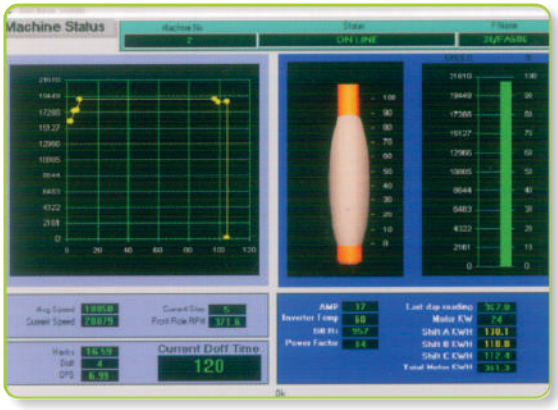
*: Under development

Standard Specification

Control method	Sine P.W.M. Control
Frequency accuracy	Digital setting: ±0.1% Analog setting: ±0.5% (35°C)
Frequency resolution	Digital setting: 0.5~100Hz 0.01Hz 100Hz~240Hz 0.1Hz Analog setting: (setting value/1000)Hz
Frequency range	0.5~240Hz (Initial frequency 0.5~30Hz)
V/F ratio	10 pattern, or any V/F pattern
Torque compensation	0~15.0% voltage compensation, automatic voltage compensation
Acceleration/ Deceleration time	0.1~6000 sec (linear, two-step setting)
Motor Braking	DB built-in, connect extra braking resistor to reach 100% braking
DC Braking	DC Injection Braking (Setting mode, torque, time, active frequency)
Standard feature	Digital setting by keypad, or external analog signal (DC0~10V, DC4~20mA), frequency setting knob
Frequency setting	Free run restart, jogging speed, upper/lower frequency limit setting, jump frequency setting, 8-step speed settin g, frequency indicated output (DC0~10V), operation direction setting, forward/reverse prohibit, voltage/current limit, date lock, EMI (with CT2000ESe only)
Display	7-segment LED display: Frequency, current, voltage, setting value, function, failures status, Temperature of PIM module
Protection	Low voltage, over voltage, instantaneous power failure, over voltage stall, overload, over current stall, instantaneous over current, acceleration over current, deceleration over current, over heat.
Overload capacity	150% for 1 min, anti-time limit function, adjustable (25~100%)
Altitued	Altitude 1,000m or lower, keep from corrosive gasses, liquid and dust
Ambient Temperature	-10°C~50°C (Non-condensing and not frozen)
Storage Temperature	-20°C~60°C
Humidity	Relative between 45% to 90% (No condensing)

Cutes PRO-i Energy Management System





Energy Management System is an ideal tool for the objective analysis of the motor energy consumption. It essentially monitors the KW, KWH, PF, AMP and RPM.

For our clients convenience we have prepared the following screens in order to communicate with our clients on better ground.

Main Interface:

Our software can be controlled and monitor online information from anywhere in the world by connecting to the main server i.e. via the internet or direct dial up connection.

Machine Configuration:

Our software helps you in setting count speed with the help of sixteen gradually steps & time setting. You can view the changes immediately on your accurately integrated graph. Our trajectory motion implied on the graph shows that our speed increases uniformly in a projectile motion.

Machine Status Window:

Our Machine wise status window can show you live each machine working status, such as average speed, current steps & rpm, front roll rmp, hanks, doffs, ops, amp, temp, motor kwh, shift wise machine kwh, total kwh of all shifts, p.f, and machine - wise energy consumption cost in desired format.

machine Alerts:

Our main inetrface window can show the alerts when any machine will be exceeded than its limits given by users to get the alert of "over amp" or "over unit" to inform you that motor is having some problem or machine mechanical structure getting Jam.

Application Reference from Mill Site

Cutes Inverter with Jing Wei FA 1520 Ring Frame

Cutes Inverter with Marzoli DTM 129 Ring Frame

HVAC Application

HVAC Application

35715206 / 35712991

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