



Product Specification

Product Name: 60W Constant Voltage LED Driver
Product Model: LDV-060B024
Product Code: MS006634-V0
Rev. A.1

Address: No.1061, Songbai Road, Xili, Nanshan District,
Shenzhen City, Guangdong Province,
P.R.China

TEL: 0755-27657000

E-mail: wcx@mosopower.com

Post
Code: 518108

FAX: 0755-27657908

Web site: <http://www.mosopower.com>

Prepared By	Checked By	Approved By

Product Features



- ◆ Input voltage 176~264Vac;
- ◆ Constant voltage output;
- ◆ Power factor >0.95(230Vac& full load);
- ◆ Protection: SCP, OVP, OCP;
- ◆ Surge immunity: line-line 1KV, line-earth 2KV;
- ◆ IP65, glue potted, suitable for dry / wet / damp locations;
- ◆ 5 years warranty.

Application

- ◆ Suitable for landscape lighting.

DESCRIPTION

LDV-060 series is constant voltage led driver, input voltage range is 176-264vac, It is created for Landscape lighting. The high efficiency of these drivers and compact metal case enable them to run cooler, significantly improving reliability and extending product life. To ensure trouble-free operation, protection is provided against input surge, output over voltage, short circuit, and over current.

MODELS

Model Number	Input voltage range(Vac)	Max Output Power(W)	Output Voltage (Vdc)	Output Current Range (A)	Typical Efficiency	Typical THD	Typical PF
LDV-060B024	176~264Vac	60	24	0~2.50	87%	10%	0.96

Notes:

All performance parameters are measured at 25°C ambient temperature, 230VAC input, full load conditions, except for those specified

INPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	176Vac	200-240Vac	264Vac	
Input Frequency	47Hz	50/60	63Hz	
Leakage Current	-	-	0.70mA	240Vac/60Hz
Input AC Current	-	-	1.00A	200-240Vac & full load
Inrush Current(I ² t)	-	-	0.1A ² S	Cold start, 230Vac & full load
Power Factor	0.95	0.96	-	230Vac;100% load
	0.90	-	-	230Vac;60% load
THD	-	10%	15%	230Vac;100% load

OUTPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Output Voltage Tolerance	-5%	-	5%	Full load
Output Voltage Ripple	-	-	15%	Full load, Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor.
Output overshoot	-	-	10%	When the power is on
No Load Output Voltage	-	-	27.6V	200-240Vac & full load, LED Load.
Line Regulation	-	-	±5%	25°C±10°C ambient temperature, 100% load, change input from 200Vac to 240Vac, 100% Load.
Load Regulation	-	-	±5%	25°C±10°C ambient temperature, 230Vac input voltage, change load from 60% to 100%.
Turn-on Delay Time	-	1S	3S	230Vac, 100% load.

GENERAL SPECIFICATIONS

Parameter		Min.	Typ.	Max.	Notes
Efficiency @230Vac V _o =24V		85%	87%	-	25°C±10°C ambient temperature, 100% load
Dielectric Strength	Input-Output	-	3750Vac	-	10mA/60S
	Input-PE	-	1600Vac	-	
	Output- PE	-	1600Vac	-	
Grounding Resistance		-	-	0.1Ω	25A/60S
Insulation Resistance		50MΩ	-	-	Input-Output, Input-PE, Output-PE, 500Vdc/60S/25°C/70%RH
MTBF		-	200000 Hours	-	230Vac,80% load, 25°C±10°C ambient temperature (MIL-HDBK-217F)
Lifetime		-	50000 Hours	-	230Vac&100%load,65°C case temperature, refer to lifetime VS Tc curve for details.
Operating Case Temperature for Safety Tc _s		-30°C	-	+80°C	
Operating Case Temperature for Warranty Tc _w		-30°C	-	+65°C	5 years warranty Humidity: 20% to 95% RH
Storage Temperature		-40°C	-	+85°C	Humidity: 10% to 95% RH
Dimensions (LxWxH)mm		243*40*22mm			
Net Weight		380±50g/PCS			
Package		L400xW310xH285mm; 40 PCS/Ctn.			

Note: All parameters are typical values measured with Cree XLamp XP-G2 LEDs at Ta 25°C. Single-stage PFC, the input grid disturbances may cause output current fluctuations, unless otherwise noted.

SAFTY STANDARDS

Safety Category	Country / Territory	Standards
CCC	China	GB19510.1, GB19510.14
CE	Europe	EN61347-1, EN61347-2-13
CB	CB Countries	IEC61347-1, IEC61347-2-13
UL	USA	UL 8750
CUL	Canada	CSA C22.2 No.250.13-12
KC	South Korea	K61347-1, K61347-2-13
PSE	Japan	J61347-1, J61347-2-13
SAA	Australia	AS/NZS IEC 61347-2-13
		AS/NZS 61347.1

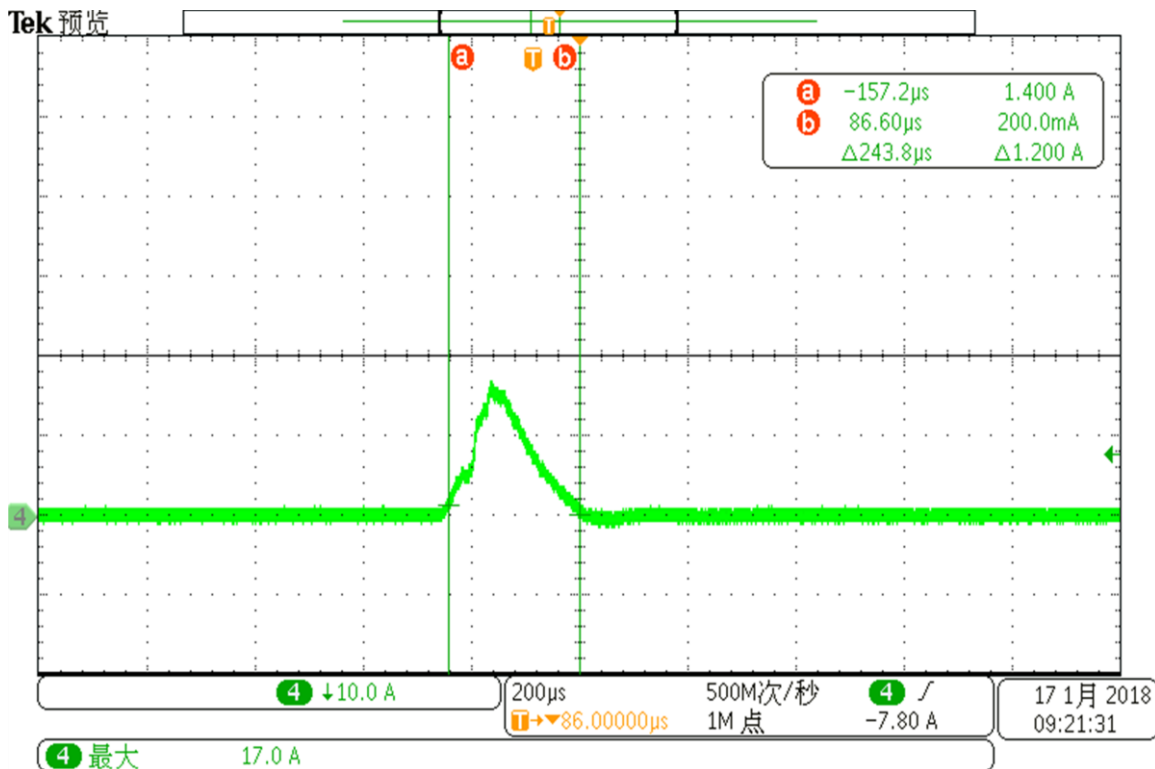
EMC COMPLIANCE

EMC Category	Country / Territory	Standards
CCC	China	GB/T 17743, GB 17625.1
CE	Europe	EN 55015, EN 61000-3-2, EN 61000-3-3
		EN61000-4-2,3,4,5,6,8,11
		EN61547
KC	South Korea	K61547
		K00015
PSE	Japan	J55015
FCC	USA	FCC part 15

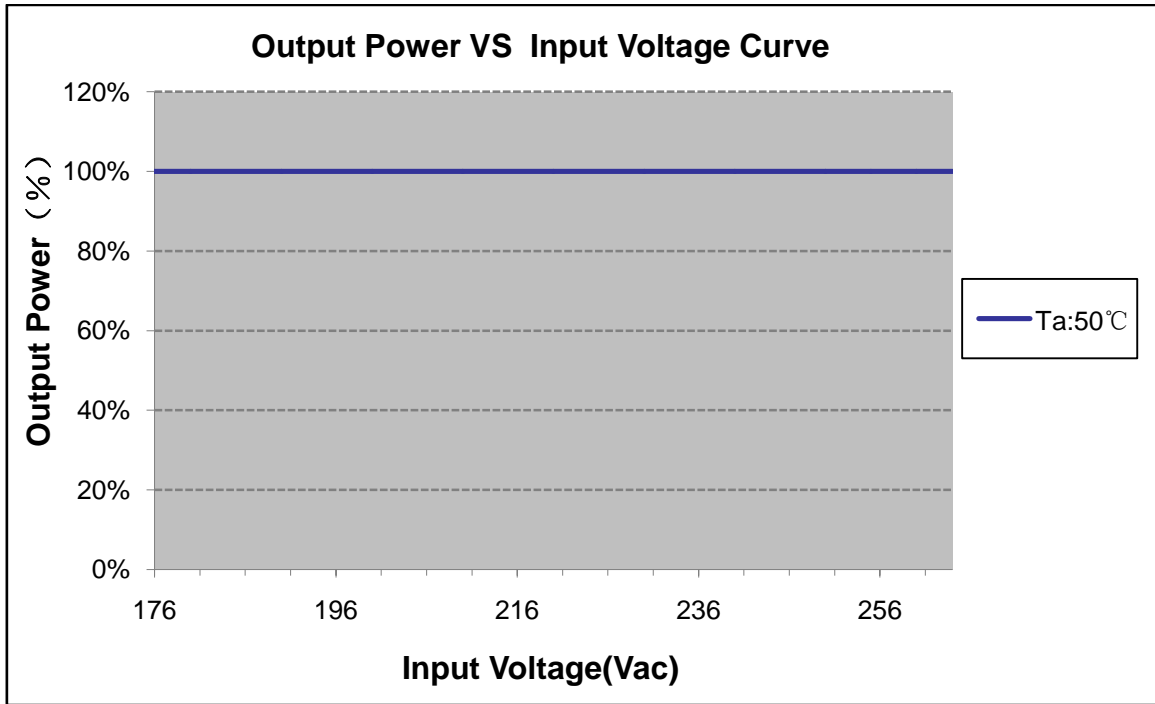
NOTE:

This LED driver meets the EMI specifications above, but EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

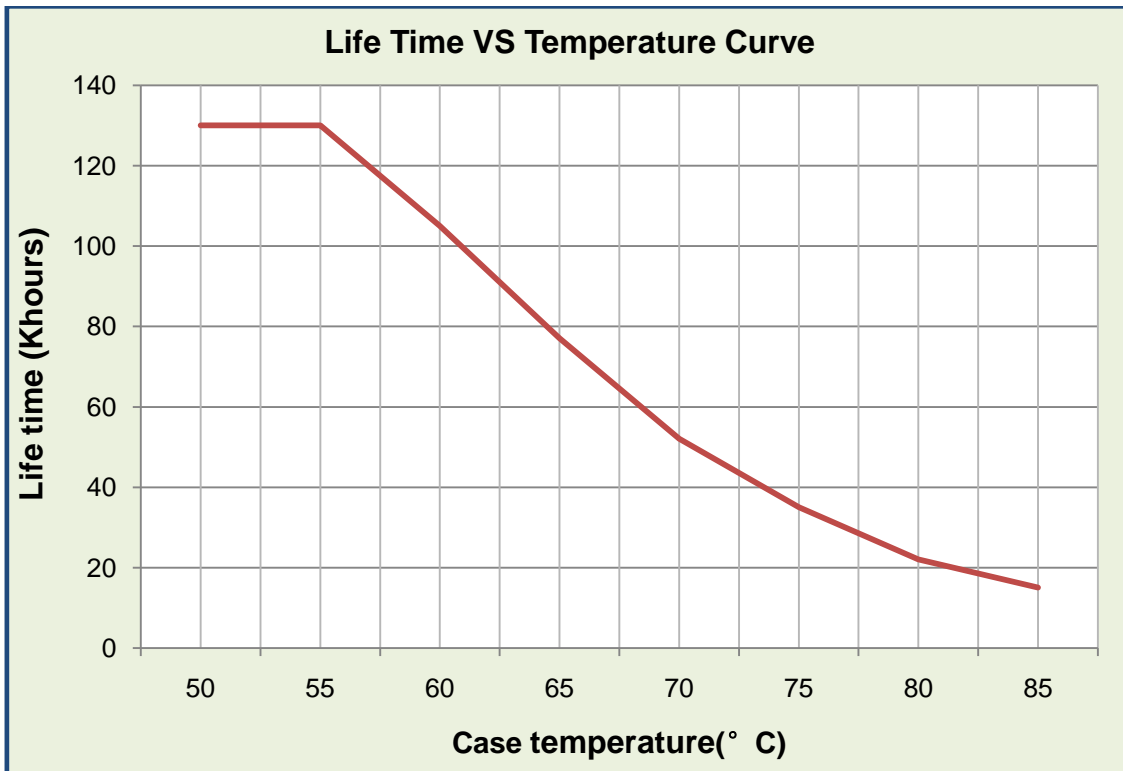
INRUSH CURRENT WAVEFORM



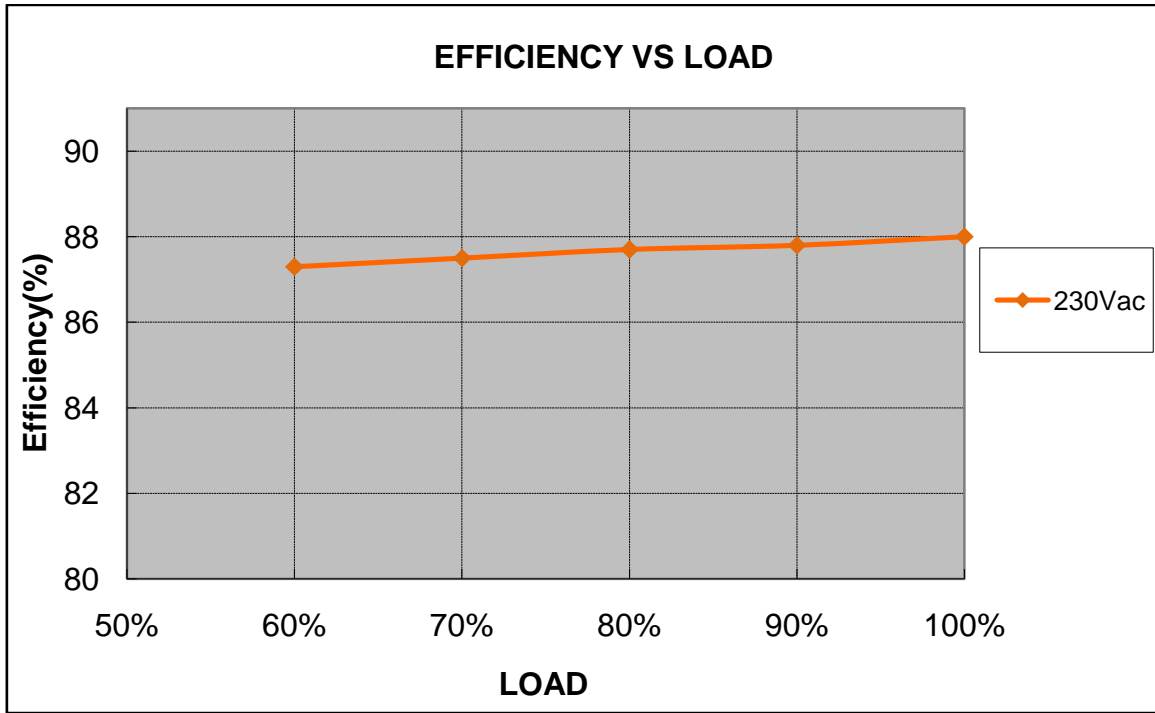
OUTPUT POWER VS INPUT VOLTAGE



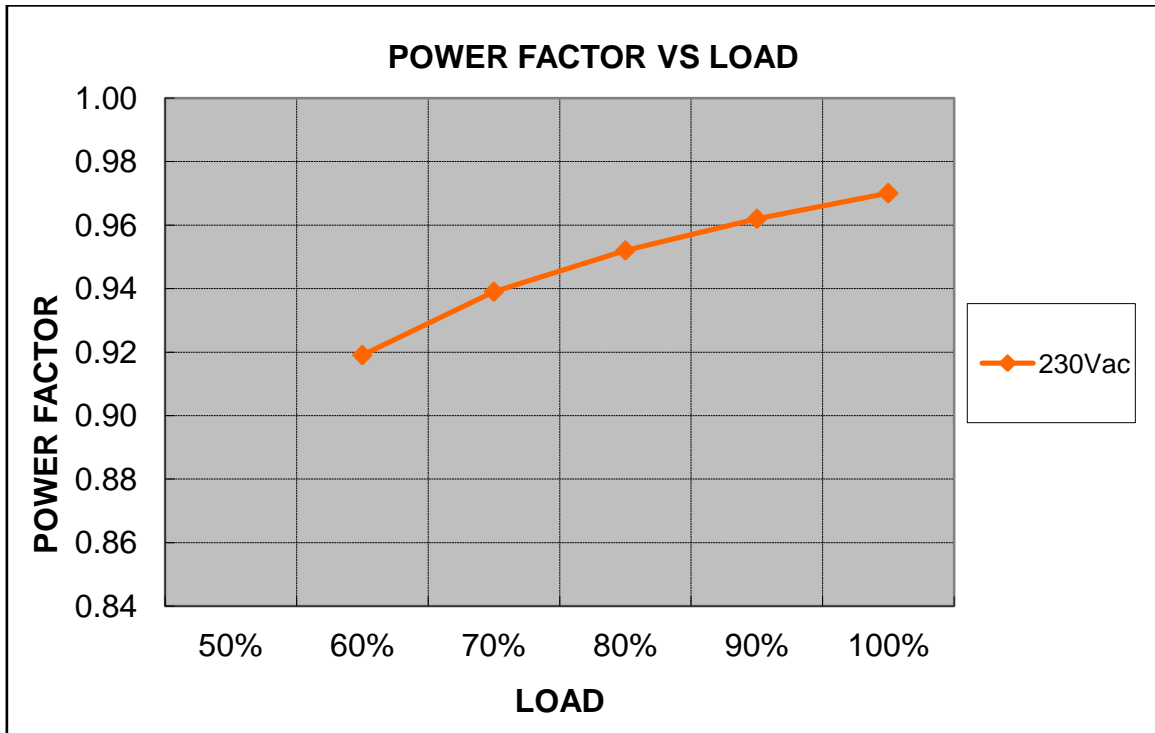
LIFETIME VS CASE TEMPERATURE



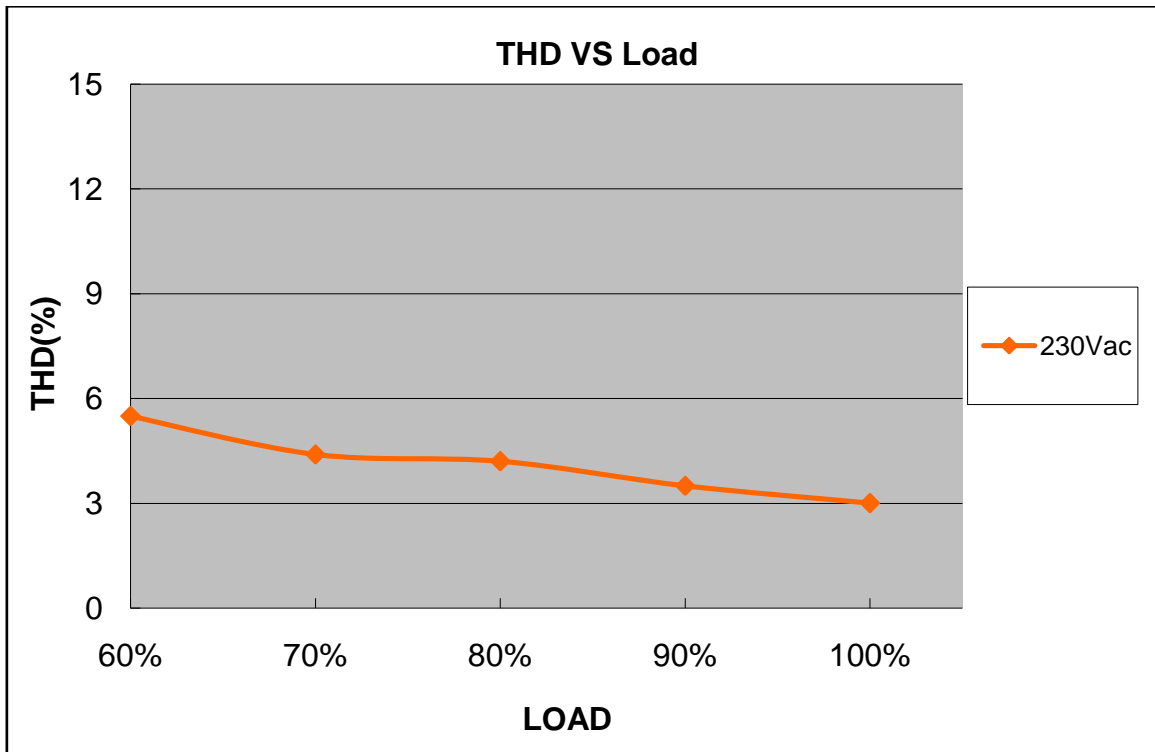
EFFICIENCY VS LOAD



POWER FACTOR VS LOAD



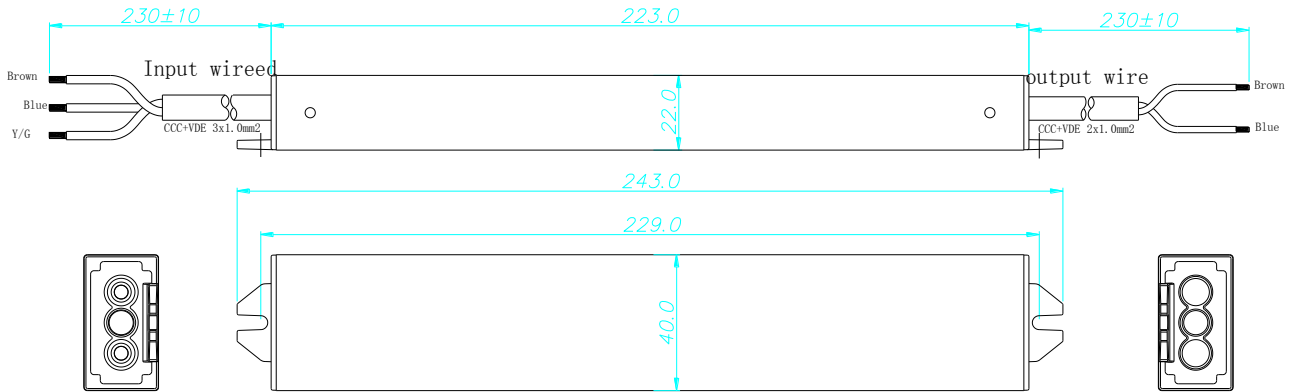
TOTAL HARMONIC DISTORTION



PROTECTIONS

Parameter	Notes
Short Circuit Protection	Hiccup mode. The output shall return to normal when the fault condition is removed.
Over Current Protection	The product will enter protection status when over 1.6 rated load current applied to the output, and the product shall be self-recovery when the fault condition is removed.
Over Voltage Protection	Run into protection model when output voltage exceeds limit, and return to normal when the fault condition is removed.

MECHANICAL OUTLINE



Wire	Specification
AC Input	CCC+VDE H05RN-F 3x1.0mm ² L=230mm
DC Output	CCC+VDE H05RN-F 2x1.0mm ² L=230mm

LABEL



REVISION HISTORY

Version	Description of Change		Date	Notes
	Before	Now		
A.1	—	Datasheets Release	2018-09-25	

Specification for Approval

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Sample Date:

CUSTOMER AUTHORIZED SIGNATURE		
Tested By	Checked By	Approved By
(Company seal)Return one copy to MOSO with approved signature and company seal.		

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