## Power Tools Technical Data

CONFIDENTIAL
Mar. 2021

PRODUCT NAME .....

## 36 V Cordless Metal Connector Nailer Model NR 3665DA

\* For the USA and Canada only

#### MARKETING OBJECTIVE .....

Pneumatic metal connector nailers are extensively used for driving metal connector nails in the USA. However, they have bothersome hoses that limit movement in the building sites. To cope with this problem and improve operating efficiency, a new cordless metal connector nailer Model NR 3665DA is developed based on our current cordless framing nailer. With the introduction of the new Model NR 3665DA, we aim to strengthen our cordless product lineup as well as our batteries and expand our sales and market share.

#### **APPLICATIONS**

• Pre-punched holed metal connector to wood stud installation only

#### SELLING POINTS ....

#### [NEW FEATURES]

1 Strap-tite probe tip

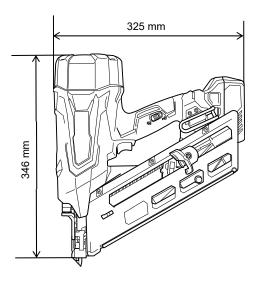
2 High power

3 Superior performance

4 Dry-fire lockout mechanism

5 Compatible with the AC/DC adapter Model ET 36A

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.



Koki Holdings Co., Ltd.

**Overseas Sales Management Dept.** 

#### **REMARKS:**

• For more information about HANDLING INSTRUCTIONS, visit our website at:

https://www.hikoki-powertools.com/manual\_view\_export/

• This TECHNICAL DATA utilizes a symbol to denote the company name and model name of our competitor. The symbol utilized herein is as follows.

Cumbal utilizad	Competitor						
Symbol utilized	Company name	Model name					
А	DEWALT	DCN693					

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#### **SELLING POINTS**

## 1 Strap-tite probe tip

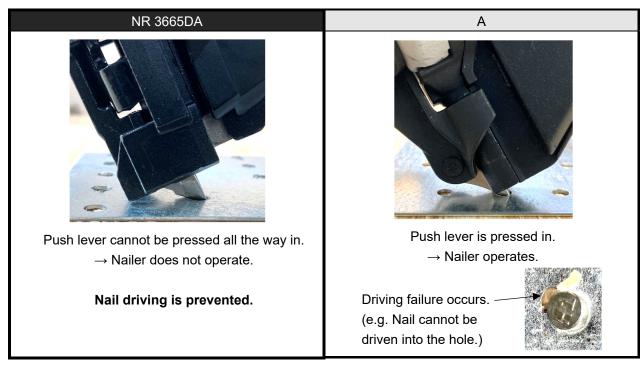
The Model NR 3665DA has a visible probe at the tip.

This probe can be easily set into the holes of the metal connectors securely to realize reliable nail driving.

In addition, the Model NR 3665DA has a protective function that will not allow nail driving unless the main body is held perpendicular to the workpiece.

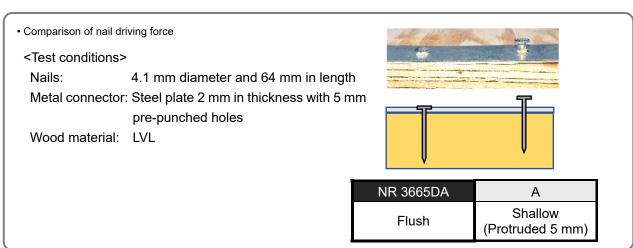
The table below shows a comparison of the Model NR 3665DA and A when driving a nail with the main body tilted.





## 2 High power

Thanks to the nail driving force higher than A (cordless product), the Model NR 3665DA can drive metal connector nails stably and securely without being affected by hardness of wood and nail size.

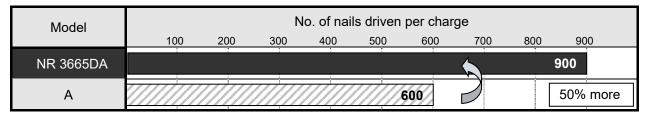


## 3 Superior performance

The Model NR 3665DA can drive per charge is 50% more than A thanks to the 36 V power unit, multi volt battery, and air spring drive system that is unaffected by factors such as workpiece materials, ambient temperature, and remaining battery level.

The graphs below show comparison between the Model NR 3665DA and A measured in our factory using the fully charged battery BSL 36A18 for the Model NR 3665DA and the fully charged battery DCB204 for A (standard accessory).

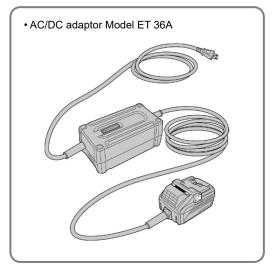
· Number of nails driven per charge



## 4 Dry-fire lockout mechanism

When about five nails are left in the magazine, this mechanism works to lock out firing, so as to protect a workpiece against damage caused by dry-fire operation.

## 5 Compatible with the AC/DC adapter Model ET 36A



The Model NR 3665DA is compatible with the AC/DC adapter Model ET 36A for continuous operation and wide range of applications.

NOTE: The thermal protector of the AC/DC adapter may activate and the nailer may stop operation denpending on the working environment.

## **SPECIFICATIONS**

## 1. Specifications of the cordless metal connector nailer

Item	Model	NR 3665DA				
Driving system		Air spring				
Motor		Fan-cooled DC brushless motor				
Applicable nail shank	dia.	0.131" to 0.162" (3.3 mm to 4.1 mm)				
Applicable nail length	1	1-1/2" to 2-1/2" (38 mm to 64 mm)				
Nail loading capacity		31 nails				
Nail feed system		Ribbon spring				
Firing mode		Full sequential				
Cycle rate		2 nails/second (Intermittent)				
Available battery*1		Multi volt battery				
Weight*2		10.6 lbs. (4.8 kg) (with BSL 36A18 battery, without hook)				
Dimensions Length x Height x Width		12-25/32" x 13-5/8" x 5" (325 x 346 x 127 mm)				
Standard accessories	XC	Charger (UC 18YSL3)       1         Battery (BSL 36A18)       1         Battery cover       1         Allen wrench for M5 screw       1         Allen wrench for M4 screw       1         Contractor bag       1         Safety glasses       1				
	NN	Allen wrench for M5 screw				

<sup>\*1:</sup> Existing batteries (BSL3660/3626X/3626/3625/3620, BSL 18.... and BSL 14.... series) cannot be used with this tool.

<sup>\*2:</sup> According to EPTA-Procedure 01/2014.

## 2. Specifications of the multi volt battery

Item	BSL 36A18						
Battery type		Sealed cylindrical lithium-ion battery with cooling windows					
Nominal voltage		DC 36 V/18 V (A	Automatic s	_			
Nominal capacity		2.5 Ah/5.0 Ah (A	utomatic s				
Continuous maximu current	m discharge	30 A/60 A (Automatic switching*1)					
Power output		1,	W 080,				
Energy		2)	k 45 Wh				
Cooling device		Pr	rovided				
Rechargeable batte	ry temperature	0°C to 50°C	(32°F to 1	22°F)			
Nominal life		Abo	ut 1,500 tin	nes of charg	jing/discharging		
Enclosure			Polycar	bonate resir	ı (black)		
Dimensions L x H x	W		116	6 x 69 x 76 r	mm		
Compatibility with	18 V tools	Compatible					
cordless products	36 V tools	Comp	atible with	t series tools only			
Available charger		Charger for slide type lithium-ion batteries					
Weight*2		700 g					
Charging time at 20	°C	About 32 minutes using the charger Model UC 18YSL3					
		Indicator lamp Re			naining battery level		
				Over 75%			
		00000	I Code A	Between 50% and 75%			
			Lights	Between 25% and 50%			
Battery level indicate	or			Less than 25%			
				Nearly empty			
			Blinks	Output su temperatu	spended due to high re. <sup>*3</sup>		
				Output sus	uspended due to failure ction.*4		
				•			

<sup>\*1:</sup> The tool itself will automatically switch over.

<sup>\*2:</sup> According to EPTA-Procedure 01/2014

<sup>\*3:</sup> Remove the battery from the tool and allow it to fully cool down.

<sup>\*4:</sup> The problem may be the battery so please contact your dealer.

## 3. Specifications of the charger

Item	Model	UC 18YSL3									
Pow	er requirements		AC single-phase, 50 Hz or 60 Hz								
	Power input		195 W								
	Charging system		Constant current and voltage control								
	Overcharge protection system		<ul><li>(1) Stop current detection</li><li>(2) Battery surface temperature detection (the</li><li>(3) 420-minute timer</li></ul>								
	Charging voltage			14.4	١V					18 V	
			В	SL 14x	x se	eries		BSL 18xx series Multi volt series			Multi volt series
			4 cells	6		8 cells		5 cells	10 cells		10 cells
	Approx. charging time at 20°C	BSL 1415S: BSL 1415: 19 BSL 1415X: BSL 1420: 29 BSL 1425: 29 BSL 1430C:		5 min. 15 min. ) min. 5 min.	BSL 1430: 20 min. BS L1440: 26 min. BSL 1450: 32 min. BSL 1460: 38 min.		3 min. 2 min.	BSL 1815X: 15 min.	BSL BSL BSL	1830: 20 min. 1840: 26 min. 1850: 32 min. 1860: 38 min.	BSL 36A18: 32 min.
Battery	Charging current		6.0 A		12.0 A			6.0 A		12.0 A	12.0 A
Ba	Pilot lamp indication		Charge indicator lamp (RED/ BLUE/ GREEN/ PURPLE)	Before charging While charging Charging complete Overhea standby Charging impossit	) ) ) t	Blinks (RED)  Blinks (BLUE)  Blinks (BLUE)  Lights (BLUE)  Lights (GREEN)  Blinks (RED)	Lights for 0.5 Lights for 0.5 Lights for 0.5 Lights Lights Continue Continu	for 0.5 seconds. Does not second. (off for 1 second) for 1 second. Does not lig seconds. (off for 0.5 seconds continuously continuously nuous buzzer sound: about seconds. (off for 0.3 seconds. (off for 0.3 seconds. (off for 0.1 seconds. (off	t light onds)  t light light onds)  ut 6  t light onds)	Battery capacit  Battery capacit  Battery capacit  Battery capacit  Battery capacit  Charge (Charge)	y at less than 50%  y at less than 80%  y at more than 80%  ated. Unable to ing will commence
USB device	Charging voltage	5 V									
Charging current 2 A											
Prod	luct weight	1.3 lbs. (0.6 kg)									
	rating ambient perature range										

NOTE: The charger Model UC 18YSL3 has a cooling fan to cool down an overheated battery in standby mode.

• Temperature range of rechargeable batteries

The table below shows the temperature range of the rechargeable batteries. Overheated batteries should be cooled down to the specified temperature before recharging.

Temperature range of rechargeable batteries
-10°C to 50°C (14°F to 122°F)

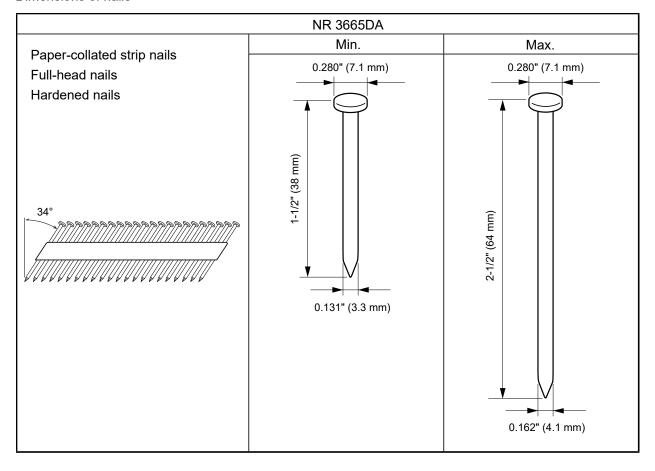
#### 4. Nail selection

The Model NR 3665DA utilizes round-head nails collated with a paper tape.

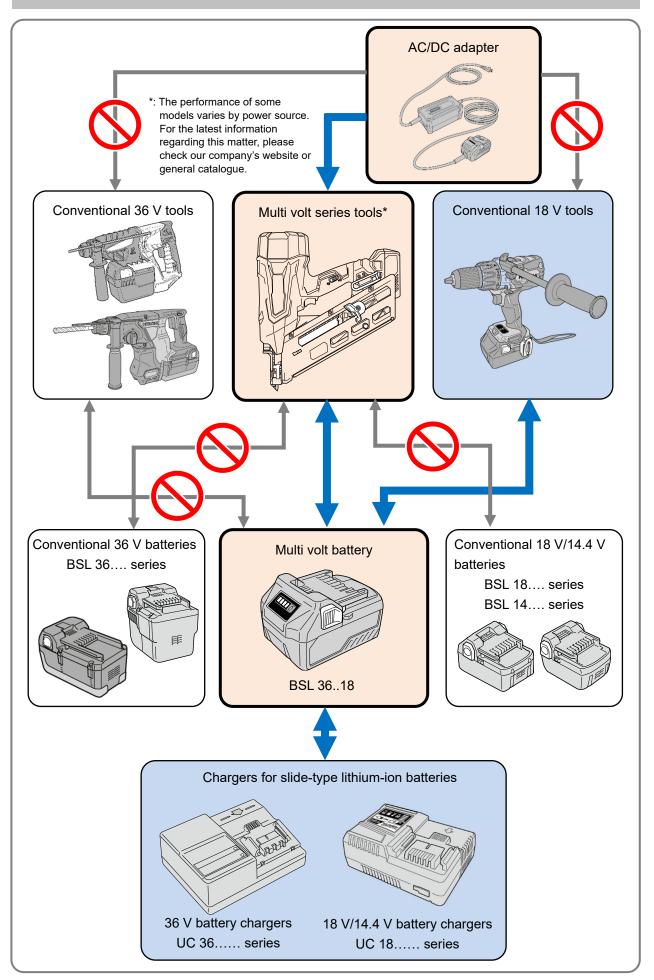
The dimensions of applicable nails are shown in the table below.

CAUTION: Be sure to use only the genuine metabo HPT nail for the NR 3665DA. Note that the use of any other nails will cause nail jams and ultimately damage the nailer.

#### · Dimensions of nails



### **COMPATIBILITY BETWEEN TOOLS AND BATTERIES**



## ф

## 1. Comparison of specifications

(Superior specifications:

Model		NR 3665DA	А	< Reference > NR 65AK2 (S)	
Driving type		Air spring	Flywheel	Pneumatic	
Nail type		Metal connector nail	Metal connector nail	Metal connector nail	
Applicabl	le nail shank diameter	0.131" to 0.162" (3.3 mm to 4.1 mm)	0.131" to 0.162" (3.3 mm to 4.1 mm)	0.131" to 0.162" (3.3 mm to 4.1 mm)	
Applicabl	le nail length	1-1/2" to 2-1/2" (38 mm to 64 mm)	1-1/2" to 2-1/2" (38 mm to 64 mm)	1-1/2" to 2-1/2" (38 mm to 64 mm)	
Nail loadi	ing capacity	31 nails	29 nails	29 nails	
Motor		Brushless motor	Brushless motor	<del>-</del>	
Firing mo	ode	Full sequential	Full sequential (Normal/Rapid)	Single sequential	
Method o	of positioning	Probe	Probe	Nail point	
Protection	n against tilted driving	Provided	Not provided	Provided	
Response	e	70 ms	100 to 120 ms (Normal) 40 ms (Rapid)	10 ms	
Nailing de	epth control	Not provided (Unnecessary)	Provided	Not provided	
Dry-fire lo	ockout mechanism	Provided	Provided Provided		
Hook		Provided (Steel)	Provided (Plastic)	Not provided	
Number of	of driven nails per charge <sup>*1</sup>	900 nails (by a 2.5 Ah battery)	600 nails (by a 4.0 Ah battery)	_	
	Туре	Li-ion	Li-ion	_	
Battery	Nominal capacity	2.5 Ah	4.0 Ah	<del>-</del>	
Бацегу	Nominal voltage	36 V	18 V	<del>-</del>	
	Charging time	32 min. (UC 18YSL3)	60 min. (DCB115)	_	
Vibration level		4.6 m/s <sup>2</sup>	_	_	
Noise lev	oise level 101 dB —		_	<del></del>	
Overall height x length including battery		13-5/8" x 12-25/32" (346 x 325 mm)	13-3/4" x 13-1/4" (348 x 336 mm)	13-3/16" x 11-13/16" (335 x 300 mm)	
Weight listed on the manual		10.6 lbs. (4.8 kg) with a 2.5 Ah battery, without hook	9.1 lbs. (4.1 kg) with a 4.0 Ah battery	5.7 lbs. (2.6 kg)	

<sup>\*1:</sup> Using a standard accompanying battery

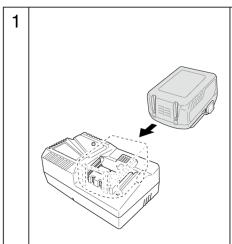
#### PRECAUTIONS ON SALES PROMOTION

#### 1. Precautions on use

The package of this product contains a PRECAUTION sheet (printed on both sides of a JIS A5 or A4 size sheet) listing the precautions that the user should observe for using the product safely and correctly to avoid misuse and possible initial trouble. Please tell every customer to read and comprehend the precautions.

• PRECAUTION sheet (front side)

# PRECAUTIONS FOR CORDLESS NAILERS PRÉCAUTIONS POUR CLOUEUR SANS FIL PRECAUCIONES PARA CLAVADORAS A BATERÍAS



#### (English)

#### **Battery Use**

Battery must be charged before use. Batteries are shipped with limited charge.

#### (Français)

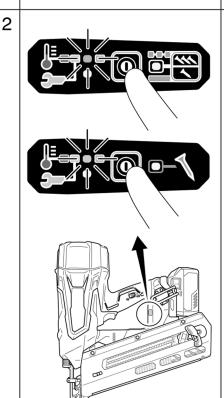
#### Utilisation de la batterie

La batterie doit être chargée avant utilisation. Les batteries sont livrées avec une charge limitée.

#### (Español)

#### Uso de la batería

La batería debe ser cargada antes de ser utilizada. Las baterías son enviadas con una carga limitada.



#### (English)

#### **Power ON and OFF**

To start using the nailer, the unit must be powered on. To power on, push and hold the power button for at least one second. To power the nailer off, push and hold the power button for at least one second.

#### (Français)

#### Power ON et OFF

Pour commencer à utiliser le cloueur, l'appareil doit être mis sous tension. Pour allumer, appuyez et maintenez le bouton d'alimentation pendant au moins une seconde. Pour éteindre le cloueur, appuyez et maintenez le bouton d'alimentation pendant au moins une seconde.

#### (Español)

#### Encendido y apagado

Para empezar a usar la clavadora, la unidad debe ser encendida. Para encenderla, mantenga pulsado el botón de encendido durante al menos un segundo. Para apagarla, mantenga pulsado el botón de encendido durante al menos un segundo.

3

#### (English)

#### **Time-Out Function**

For your safety, this nailer has a 2-second time-out function. When driving a nail, If the trigger is pulled for more than two seconds or the push lever is depressed for more than two seconds without driving a nail, the time-out function will prevent a nail from firing. If this happens, simply release the trigger and/or push lever and try again.

#### (Français)

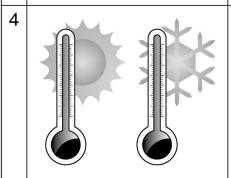
#### Fonction de limite de temps

Pour votre sécurité, ce cloueur comporte une fonction de limite de temps de 2 secondes. Lorsque vous introduisez un clou, si la gâchette est tirée pendant plus de deux secondes ou le levier de poussée est enfoncé pendant plus de deux secondes sans clou, la fonction de limite de temps empêchera l'expulsion du clou. Si cela se produit, il suffit de relâcher la gâchette et/ou pousser le levier et essayer à nouveau.

#### (Español)

#### Función de tiempo límite

Por su seguridad, esta clavadora incorpora una función de tiempo límite de dos segundos. Al introducir un clavo, si el gatillo es presionado durante más de dos segundos o la palanca de empuje se oprime durante más de dos segundos sin introducir un clavo, la función de tiempo límite evitará la expulsión de un clavo. Si esto ocurre, simplemente libere el gatillo y/o la palanca de empuje y vuelva a intentarlo.



#### (English)

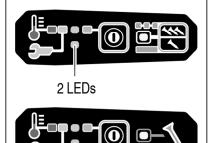
#### **Thermal Protection**

This nailer comes equipped with an internal thermal protection circuit. If the temperature of the nailer is in a condition that is too cold (below 23°F or -5°C) or too hot, the 2 LEDs will blink in red for approximately 10 seconds, then the nailer will power off. Should this occur, please allow the nailer to thoroughly warm or cool to an adequate temperature.



#### **Protection thermique**

Ce cloueur est équipé d'un circuit thermique interne de protection. Si la température du cloueur est trop basse (en dessous de 23°F ou -5°C) ou trop élevée, les 2 DEL clignotent en rouge pendant environ 10 secondes, puis le cloueur se met hors tension. Si cela se produit, veuillez permettre au cloueur de bien se réchauffer ou refroidir à une température adéquate.



2 LEDs

#### (Español)

#### Protección térmica

Esta clavadora está equipada con un circuito interno de protección térmica. Si la temperatura de la clavadora es demasiado fría (por debajo de 23 °F o -5 °C) o demasiado caliente, los 2 LED, parpadearán en rojo durante aproximadamente 10 segundos y la clavadora se apagará. Si esto ocurre, espere a que la clavadora se caliente o enfríe hasta alcanzar la temperatura adecuada.

### 2. Safety instructions

In the interest of promoting the safest and most efficient use of the cordless metal connector nailer Model NR 3665DA by all of our customers, it is very important when concluding a sale that the salesperson carefully ensures that the buyer seriously recognizes the importance of the handling instructions, and fully understands the precautions listed on the warning label and name plate attached to each tool.

#### A. Handling instructions

Salespersons must be thoroughly familiar with the handling instructions in order to give pertinent advice to the customers. In particular, salespersons must have a thorough understanding of precautions on the use of cordless tools, which differ from those on the use of ordinary electric power tools.

#### (1) Before use, ensure that the battery is fully charged.

A new battery is not fully charged. Even if the battery was fully charged at the factory, long periods of inactivity, such as during shipping, cause the battery to lose its charge. Customers must be instructed to fully charge the battery prior to use.

- (2) For battery charging, only use the dedicated charger Model UC 18YSL3 provided with the tool. Due to the designed rapid-charging feature, the use of other battery chargers is hazardous.
- (3) Connect the charger Model UC 18YSL3 to an AC power outlet only.
  Using any other power source (e.g., DC outlet, fuel-powered generator) will cause the charger Model UC 18YSL3 to overheat and burn out.
- (4) Do not use any voltage-increasing equipment (e.g., transformer) between the power source and the charger.

Using the charger at a voltage higher than that indicated on the unit will result in malfunction.

#### (5) Charge the battery in an ambient temperature range of -10°C to 40°C (14°F to 104°F).

Special temperature-sensitive devices are employed in the charger to permit rapid charging. Ensure that customers are instructed to use the charger in the indicated ambient temperature range. At temperatures below -10°C (14°F) when using the charger Model UC 18YSL3, the thermostat will not function properly, and the battery may be overcharged. At temperatures above 40°C (104°F), the battery cannot be sufficiently charged. The optimum temperature range is 20°C to 25°C (68°F to 77°F).

#### (6) The charger should not be used continuously.

Charging batteries successively at high ambient temperature will cause the temperature of the transformer coils to rise, running the risk of the thermal fuse inserted inside the transformer inadvertently melting. After charging one battery, wait at least 15 minutes before charging the next one.

#### (7) Do not attempt to disassemble the battery or charger.

The battery and charger incorporate special parts such as thermostats for rapid charging. Wrong parts replacement and/or wiring will cause device malfunctions and, in extreme cases, cause fire and other hazards. Instruct the customer to bring these units to a customer's local authorized service center whenever they need repair or parts replacement.

#### (8) Disposal of the batteries

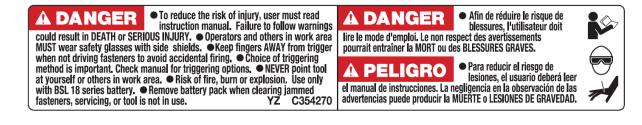
Ensure that all customers understand that each battery should be returned to the metabo HPT power tool sales outlet or local authorized service center when it cannot be recharged or repaired any more. Never throw it into fire. Doing so may result in the battery exploding.

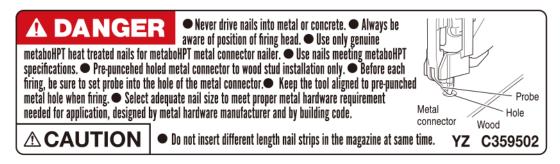
#### B. Cautions listed on labels

- (1) The following labels are attached to the cordless metal connector Model NR 3665DA.
  - Name plate



· Warning labels





(2) Refer to the Technical Data of the charger Model UC 18YSL3 for the cautions listed on the name plate.

## Inherent drawbacks of the cordless metal connector nailer requiring particular attention during sales promotion

The cordless metal connector nailer offers many advantages, such as use in places where no power source is available, and affords easy use since there is no cord. However, any cordless tool has certain inherent drawbacks. Salespersons must be thoroughly familiar with these drawbacks in order to properly advise the customer on the most efficient use of the tool.

#### A. Suggestions and precautions on efficient use of the tool

#### (1) Do not insert foreign objects into body vent holes.

A foreign object inserted through a vent hole may cause failure. Instruct the customers to never insert foreign objects into the vent holes.

#### (2) Avoid long continuous use.

This tool is equipped with a thermal protector to protect the motor and electronic components that control motor operation against thermal damage. When this tool runs continuously under a high load and its internal temperature exceeds a preset temperature, the thermal protector works to stop the tool. Especially when the tool is subjected to a high-load operation beyond its capacity, the motor output may be decreased before the tool stops automatically in order to prevent a sudden rise in temperature. The operator may feel that the tool's power becomes weaker. However, there is no failure. In such a case, stop using the tool and allow it to fully cool down.

When changing the battery halfway during long continuous operation, stop using the tool and allow the tool to rest for about 15 minutes.

NOTE: If the tool is not fully cooled down after the thermal protector works, it will not start even when the trigger switch and pushing lever are ON. Wait until the tool is fully cooled down.

#### (3) Keep the battery free of dust.

Protect the battery from being covered with dust during operation. Protect the battery from being covered with dust accumulated on the tool during operation. Do not leave the battery in a dusty area when not in use. Remove dust from the battery and store it separately from such metallic parts as screws and nails.

#### (4) Never allow magnets or similar magnetic devices to be near the nailer.

Do not allow magnets or similar magnetic devices to be near the nailer, because the nailer has a magnetic sensor inside. Otherwise, you run the risk of failure or injury caused by malfunction.

#### B. Variation in amount of work possible per charge

The actual capacity of the lithium-ion battery may vary within 10% depending on the ambient temperature during use and charging, and the number of times the battery has been recharged.

#### C. Storing the lithium-ion battery

Check that the lithium-ion battery is fully charged before storing for a long period (3 months or longer). If the remaining battery level is low, the battery may not be rechargeable after prolonged storage.

#### D. Protective function of the lithium-ion battery

The lithium-ion battery has a protective function that automatically stops output to extend its service life. Therefore, the motor may stop automatically in the cases 1 to 3 described below, even if the switch is turned on during operation. This is due to the protective function and is not a fault.

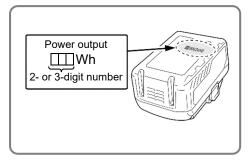
- 1. When the battery is nearly depleted, the motor stops. Instruct the customer to recharge the battery immediately in such case.
- 2. When the tool is overloaded, the motor may stop. Instruct the customer to turn off the switch and eliminate the cause of overload in such case.
- 3. When the battery is overheated, the motor may stop. Instruct the customer to stop using the battery, remove it from the main unit, and allow the battery to fully cool down in a shaded and airy location in such case.

#### E. Regarding lithium-ion battery transportation

When transporting a lithium-ion battery, please observe the following precautions.

WARNING: Notify the transporting company that a package contains a lithium-ion battery, inform the company of its power output and follow the instructions of the transporting company when arranging transport.

- Lithium-ion batteries that exceed a power output of 100 Wh are considered to be in the freight classification of Dangerous Goods and will require special application procedures.
- For transportation abroad, you must comply with international law and the rules and regulations of the destination country.
- If the battery Type BSL 36B18 is installed in the power tool, the power output will exceed 100 Wh and the unit will be classified as Dangerous Goods for freight classification.



#### F. Precautions on efficient use of the charger and the battery

When the multi volt battery is exposed to direct sunlight for an extended period or the tool has just been operated for a long time, recharging may be disabled if the battery is hot (above 50°C (122°F)). In such a case, the customer should be advised to place the battery in a well-ventilated shaded place and allow it to fully cool down before recharging. This phenomenon is common to all existing batteries and chargers that employ temperature-sensitive overcharge protection devices. The cooling time necessary before recharging extends from a few minutes to about 40 minutes, depending on the load, duration of use, and ambient temperature.