# Opto-Relay



LED indicators equipped are to correctly show the status of operation. Users can easily read and be aware of operational status despite dim environment.

# Color & number coding for wiring identification

DINKLE Opto Relay modules are marked by different colors for better identification of contact points. Special made labels of numbering also enhance correct positioning and efficiency while wiring.

# Patented cross jumpers equipped

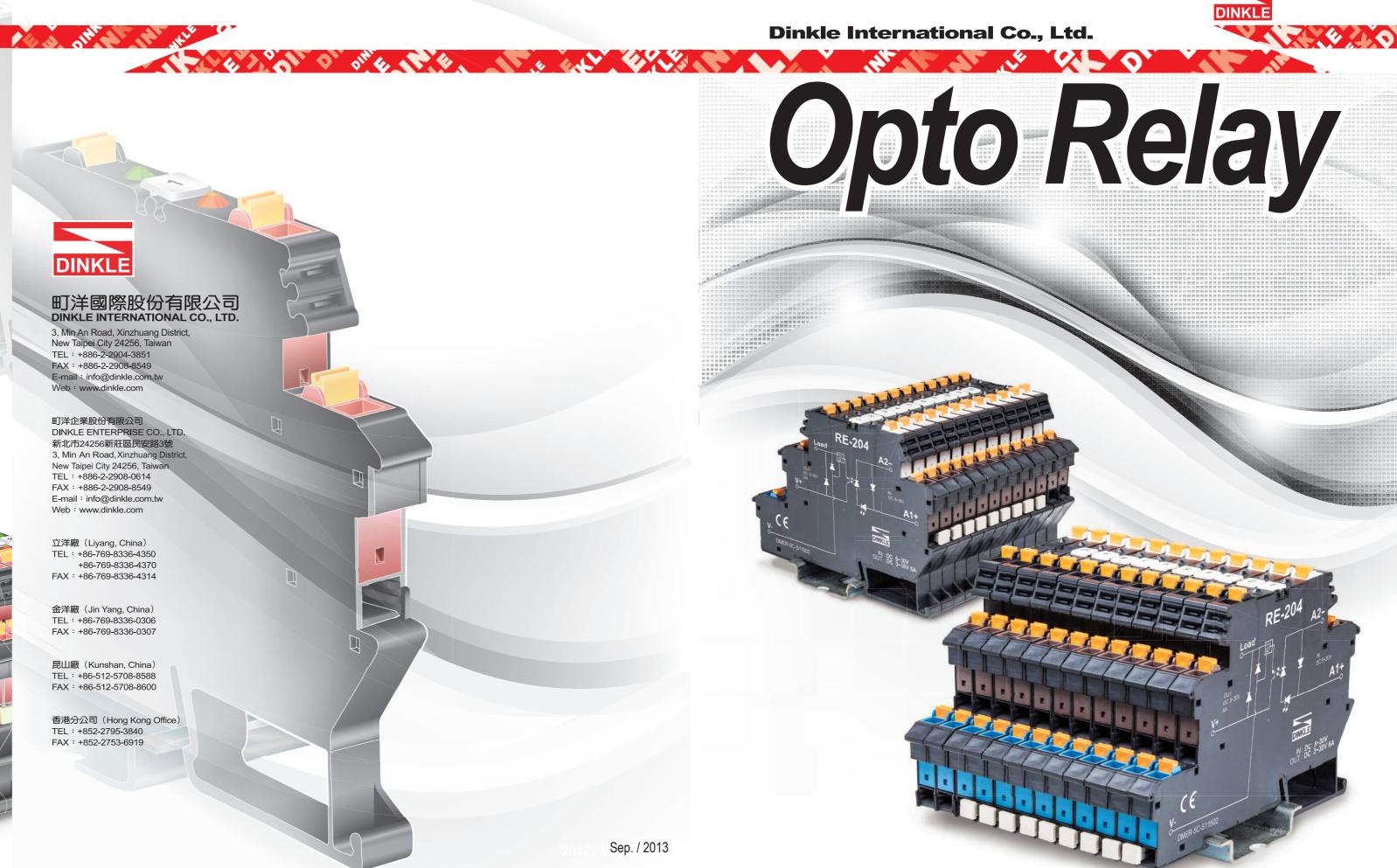
The patented jumper (DS-210) is the handy accessory helpful to easily connect adjacent poles, and facilitates setup of power distributor. It can be easily stored in the slot of terminal blocks, and therefore brings convenience while installing

DINKLE Opto Relay modules can be assembled in compact space due to slim design of 6.1 mm thickness. 70% space-saving is highly favorable to the size of application regardless of high-density connection is required.

## The features of RE series Opto Relay include:

- Spark & arching free, superior isolation & safety to traditional relays
- Low temperature rising to ensure safety of the products vs. PH relay modules
- 10 times faster (100 Hertz) switching frequency for highly precise requirement
- Dust and humidity resistant
- Longevity and low defect rate
- Color & number coding for wiring identification
- Patented cross jumpers equipped
- Space saving by 70% off vs. traditional relay modules
- UL508 compliant (NMFT- Solid State Controls for Motor Loads)









# RE-0014

Technical Da	ıta <sup>c</sup>	UL US LISTED	( (	Technical Da	ata <sup>c</sup>	UL) US LISTED	CE				
nput (Contro	l side) [	Data		Input (Control side) Data							
Rated input voltage		5~30 VDC		Rated input voltage	Rated input voltage						
Rated input current		6mA		Rated input current	Rated input current						
Status indicator		LED		Status indicator	Status indicator						
Max. Switching frequ	ency	10kHz		Max. Switching frequ	Max. Switching frequency						
Output (Load	side) D	ata		Output (Load side) Data							
Rated Switching volta	age	3~30 VDC		Rated Switching volta	Rated Switching voltage						
Rated Switching curr	ent	100mA		Rated Switching curr	Rated Switching current						
/oltage drop at Max.		<1V		Voltage drop at Max.	Voltage drop at Max.						
General Data				General Data							
Operation temperatur	re	-25°C∼60°C		Operation temperatu	-25°C~60°C						
Storage temperature		-40°C∼70°C		Storage temperature							
Rated impulse withstand oltage		2.5kV		Rated impulse withst voltage	Rated impulse withstand voltage						
Vire strip length		7~9mm		Wire strip length	7∼9mm						
nsulating material		PA		Insulating material	Insulating material						
orque (N-m)		0.6		Torque (N-m)	Torque (N-m)						
xHxW(mm)		6.1 x 60.8 x 67.5		TxHxW(mm)	TxHxW(mm)						
Accessaries		Cat. No.		Accessaries	Cat. No.						
End cover		DMERC	-BK	End cover		DMERC	-BK				
nsertion bridge		CSC-402PN		Insertion bridge	CSC-402PN						
iocition bridge		CSC-410PN		inscrion bridge	CSC-410PN						
Marking label		TM21		Marking label	Marking label						
Nounting Rail		TS-35 / TS-32		Mounting Rail	TS-35 / TS-32						
ool		0.5 x 3.0	lmm	Tool		0.5 x 3.0	)mm				
Color Description Input Output				Color Description	Color Description Input Output						
				Color Description							
Option				Option							



RE-0024

RE-0034					
Technical Data	CUL US LISTED ( E				
Input (Control side)	Data				
Rated input voltage	100~240 VAC				
Rated input current	8mA				
Status indicator	LED				
Max. Switching frequency	60Hz				
Output (Load side)	Data				
Rated Switching voltage	3~48 VDC				
Rated Switching current	500mA				
Voltage drop at Max.	<1V				
General Data					
Operation temperature	-25°C∼60°C				
Storage temperature	-40°C∼70°C				
Rated impulse withstand	2.5kV				
voltage	Z.JKV				
Wire strip length	7~9mm				
Insulating material	PA				
Torque (N-m)	0.6				
TxHxW(mm)	6.1 x 60.8 x 67.5				
Accessaries	Cat. No.				
End cover	DMERC-BK				
	CSC-402PN				
Insertion bridge	: CSC-410PN				
Marking label	TM21				
Mounting Rail	TS-35 / TS-32				
Tool	0.5 x 3.0mm				
o Input					
Color Description Output					
Option					



RE-1043

Technical Data CUL US LISTED ( €

100Hz

-25°C~60°C -40°C∼70°C

2.5kV

6.2 x 61.7 x 91 Cat. No.

> \_ DS-210

TM21

TS-35

0.5 x 3.0mm

Input White, Brown

RE-1041 (Including Insertion Bridge DS-210\*3pcs)

Rated input voltage Status indicator Max. Switching frequency

Rated Switching current

General Data Operation temperature

Storage temperature Rated impulse withstand

Wire strip length Insulating material Torque (N-m)

Accessaries

End cover

Insertion bridge

Marking label

Mounting Rail

Output (Load side) Data











	RE-10	053	RE-1113				RE-1213			
Technical D	ata	CUL) US LISTED ( E	Technical D	ata <sup>(</sup>	: UL US LISTED	( €	Technical D	ata	UL US LISTED	C
Input (Control side) Data			Input (Contro	ol side)	Data	Input (Control side) Data				
Rated input voltage		100~240 VAC	Rated input voltage	5~30 VDC		Rated input voltage	100~240 VAC			
Rated input current		8mA	Rated input current	6mA		Rated input current	8mA			
Status indicator		LED	Status indicator		LED		Status indicator	LED		
Max. Switching free	quency	60Hz	Max. Switching freq	100Hz		Max. Switching freq	uency	60Hz		
Output (Load side) Data			Output (Loa	d side) [	Data	Output (Load side) Data				
Rated Switching vo	,		3~30 VDC Rated Switching v		Itage 3~30 VDC		Rated Switching vol	3~30 VDC		
Rated Switching cu	rrent	6A	Rated Switching current		10A		Rated Switching cu	10A		
Voltage drop at Max	X.	<1V	Voltage drop at Max. <1				Voltage drop at Max. <1V			
General Data			General Data	 а		General Data				
Operation temperat	ture	-25°C∼60°C	Operation temperature		-25°C∼60°C		Operation temperat	-25°C∼60°C		
Storage temperatur	re	-40°C∼70°C	Storage temperature		-40°C∼70°C		Storage temperature		-40°C∼70°C	
Rated impulse withstand voltage		2.5kV	Rated impulse withstand voltage		2.5kV		Rated impulse withstand voltage		2.5kV	
Wire strip length 7∼8m		7~8mm	Wire strip length		7~8mm		Wire strip length		7~8mm	
Insulating material P/		PA	Insulating material		PA		Insulating material		PA	
Torque (N-m)		0.4	Torque (N-m)		0.4		Torque (N-m)		0.4	
TxHxW(mm)		6.2 x 61.7 x 91	TxHxW(mm)		6.2 x 61.7 x 91		TxHxW(mm)		6.2 x 61.7 x 91	
Accessaries	Accessaries Cat. No.		Accessaries		Cat. No.		Accessaries		Cat. No.	
End cover	End cover —		End cover				End cover		_	
Insertion bridge DS-210		Insertion bridge		DS-210		Insertion bridge		DS-210		
Marking label TM21		Marking label		TM21		Marking label		TM21		
Mounting Rail TS-35		Mounting Rail		TS-35		Mounting Rail		TS-35		
Tool	Tool 0.5 x 3.0mm		Tool		0.5 x 3.0mm		Tool		0.5 x 3.0mm	
Color Description	Input Output	Red , Red Black , Brown , Blue	Color Description	Input Output	White, Brown Black, Brown, Blue		Color Description	Input Output	Red, Red Black, Brov	wn Blue
Option	RF-1051		Option		RE-1111		Option		RE-1211	
Option	(Including Insertion Bridge DS-210*3pcs)		Οριιστί	(Including Insertion Bridge DS-210*3pcs)			Ομισι1	(Including Insertion Bridge DS-210*3		



RE-2043



RE-2053





RE-2213

Technical D	Data <sup>c</sup>	UL US LISTED CE	Technical D	ata	CUL)US LISTED <b>(</b>	Technical D	ata <sup>(</sup>	US LISTED CE	Technical Da	ata <sup>(</sup>	C UL US LISTED <b>C</b>	
Input (Control side) Data		Input (Control side) Data			Input (Control side) Data			Input (Control side) Data				
Rated input voltage	Э	5~30 VDC	Rated input voltage	:	100~240 VAC	Rated input voltage		5∼30 VDC	Rated input voltage		100~240 VAC	
Rated input current	t	6mA	Rated input current		8mA	Rated input current		6mA	Rated input current		8mA	
Status indicator		LED	Status indicator		LED	Status indicator		LED	Status indicator		LED	
Max. Switching free	quency	100Hz	Max. Switching frequency		60Hz	Max. Switching frequency		100Hz	Max. Switching frequency		60Hz	
Output (Loa	nd side) [	Data	Output (Load side) Data			Output (Load side) Data			Output (Load side) Data			
Rated Switching voltage 3~30 VDC		Rated Switching vo	ltage	3~30 VDC	Rated Switching voltage		3~30 VDC	Rated Switching voltage		3~30 VDC		
Rated Switching cu	urrent	6A	Rated Switching cu	rrent	6A	Rated Switching current		10A	Rated Switching current		10A	
Voltage drop at Max	IX.	<1V	Voltage drop at Max	Voltage drop at Max. <1V		Voltage drop at Max. <1		<1V	Voltage drop at Max.		<1V	
General Dat	a		General Data			General Data			General Data			
Operation temperat	ture	-25°C∼60°C	Operation temperature -25°C∼60°C		Operation temperature		-25°C∼60°C	Operation temperature		-25°C∼60°C		
Storage temperatur	re	-40°C∼70°C	Storage temperature -40°C~70°C		Storage temperature		-40°C∼70°C	Storage temperature		-40°C∼70°C		
Rated impulse withstand voltage 2.5kV		Rated impulse with voltage	· 25kV		Rated impulse withstand voltage		2.5kV	Rated impulse withstand voltage		2.5kV		
Wire strip length		11mm	Wire strip length 11mm		Wire strip length		11mm	Wire strip length		11mm		
Insulating material PA		PA	Insulating material PA		Insulating material		PA	Insulating material		PA		
Torque (N-m)		Torque (N-m)		Torque (N-m)	Torque (N-m)		Torque (N-m)					
TxHxW(mm) 6.2 x 61.7 x 91		TxHxW(mm) 6.2 x 61.7 x 91		6.2 x 61.7 x 91	TxHxW(mm)		6.2 x 61.7 x 91	TxHxW(mm)		6.2 x 61.7 x 91		
Accessaries Cat. No.		Cat. No.	Accessaries Cat. No.		Accessaries Cat. No.		Cat. No.	Accessaries		Cat. No.		
End cover		_	End cover		_	End cover		_	End cover		_	
Insertion bridge DS-210		Insertion bridge DS-210		Insertion bridge DS-210		DS-210	Insertion bridge		DS-210			
Marking label TM21		Marking label TM21		Marking label TM21		Marking label		TM21				
Mounting Rail TS-35		Mounting Rail TS-35		Mounting Rail TS-35		Mounting Rail		TS-35				
Tool 0.5 x 3.0mm		Tool 0.5 x 3.0mm		Tool 0.5 x 3.0mm		0.5 x 3.0mm	Tool		0.5 x 3.0mm			
Color Description	Input	White, Brown	Color Description Input		Red, Red	Color Description	Input	White, Brown	Color Description	Input	Red, Red	
	Output	Black, Brown, Blue	Color Description	Output	Black, Brown, Blue	COIDI DESCIPION	Output	Black, Brown, Blue	COOL DESCRIPTION	Output	Black, Brown, Blu	
Option	(Including I	RE-2041 Insertion Bridge DS-210*3pcs)	Ontion			Option	RE-2111 (Including Insertion Bridge DS-210*3pcs)		Option	(Including	RE-2211 Insertion Bridge DS-210	







