

UL 驗證 Category code: [YCFT2](#) (Motor Controller)

YCFT2 Industrial Truck Accessories, Battery Powered - Component 市場概況

USA	Italy	Japan	Mexico	Netherland	Korea	Sweden	China
59	12	4	3	2	6	2	5
Germany	Canada	Czech	Finland	France	India	Taiwan	
6	3	1	1	1	1	2	

Japan: Toyota/Mitubishi: Motor controller

Mexico: Motor

Korea: DC Converter/AC motor/Steering Controller

Sweeden: Vihlco master controller

1. [XWJV](#) Trucks, Electric-battery-powered) Trucks, Industrial, Type E
2. XVVX

This category covers electric-battery-powered industrial trucks classed as Types E, CGH, E or CGH, EE or ES.

Types E, CGH, E or CGH, EE and ES industrial trucks have been certified only as to fire and electric shock hazards for use in locations defined in ANSI/NFPA 505, "Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operations."

Unless marked to indicate otherwise, industrial trucks are tested on a course having a ramp with a 5% minimum grade.

3. [XWXT](#) Trucks, Electric-battery-powered) Trucks, Industrial, Type EE
4. XWJV.Trucks, Electric-battery-powered) Trucks, Industrial, Type ES
5. 慎選驗證公司
6. 整合國內所有潛在廠商一起參與,降低成本

7. 機器人(UL)

a. UL Category: /

TETZ Robots and Robotic Equipment	TETZ2 Robots and Robotic Equipment – Component
Austria	Austria
France	France
Germany	----
Japan	Japan
Sweden	Sweden
United State	United State

- b. s1740_4(Fourth Edition, Dated January 26, 2018):STANDARD FOR SAFETY Robots and Robotic Equipment.[pdf](#)
- c. o3300_3Outline of Investigation for Service, Communication, Information, Education and Entertainment Robots Issue Number: 3 January 12, 2021.[pdf](#)
- d. BS EN [ISO 10218-1:2011](#). Robots and robotic devices. Safety requirements for industrial robots. Robots
- e. BS EN [ISO 10218-2:2011](#).Robots and robotic devices. Safety requirements for industrial robots. Part 2: Robots systems and integration
- f. [EN ISO 13849-1 :2015](#), Cat 3, PLd
- g. [ISO/TS 15066: 2016](#) Robots and robotic devices. Collaborative robots

Motor Controller 提問 SGS 技術員問題

A. 要以何種方式驗證? CE 機械指令(2006/42/EC)?或是型式驗證證書?

應用標準	服務內容	報價
1. 歐盟 NotifiBody	哪一 NotifiBody 執行驗證 ?	
2. EMC	實驗室如何執行測試?	
EN12895:2015 EN61000-6-4:2018	Industrial Trucks- Electromagnetic compatibility	
EN 61800-3:2018	Adjustable speed electrical power drive systems. EMC requirements and specific test methods	
3. Safety	適用安規標準選用	
EN 61800-5-1:2007+A1:2017	Adjustable speed electrical power drive systems —Part 5-1: Safety requirements —Electrical, thermal and energy	
EN 61800-5-2:2017	Adjustable speed electrical power drive systems. Safety requirements. Functional	
4. EN1175-1:1998+A1:2010	Safety of industrial trucks-Electrical requirements-Part 1: General requirements for battery powered trucks	
5. EN ISO 13849-1 :2015	Safety of machinery — Safety- related parts of control systems Part 1: General principles for design	
6. EN280:2013	Mobile elevating work platforms-Design calculations- Stability criteria - Construction - Safety- Examinations and tests	

B. 認證證書如何顯示驗證內容?

例如: DC Motor Controller used for industrial battery powered **fork lift/platform/truck** ?

C. 根據標準 [EN ISO 13849-1 :2015](#)(Safety of machinery — Safety- related parts of control systems Part 1: General principles for design) 6.2 Specifications of categories 規定

如何認定 SRP/CS (Safety-related parts control system) [6.2 Specifications of categories](#) ?

a. 技術文件審查,文件如何準備,可否提供書寫 Data Sheet 標準 Form?

b. 實務現場安裝於 truck 上測試確認?

[Category B](#) / Category 1/ Category 3/ Category 4

c. 疫情狀況下如何執行?

d. 預計費用與時間

D. UL 網站上列控所有已通過驗證產品,在 SGS 網站上有無如何查詢已認可相關電動車或推高車的網址?

Robot 提問 SGS 技術員問題

1. 要以何種方式驗證? CE 機械指令(2006/42/EC)?或是型式驗證證書?

應用標準	服務內容	報價
1.歐盟 NotifiBody	哪一 NotifiBody 執行驗證 ?	
2.EMC	實驗室如何執行測試?	
???	Industrial Trucks- Electromagnetic compatibility	
3.Safety	適用安規標準選用	
BS EN ISO 10218-1:2011.	Robots and robotic devices. Safety requirements for industrial robots. Robots	
BS EN ISO 10218-2:2011.	Robots and robotic devices. Safety requirements for industrial robots. Part 2: Robots systems and integration	
EN ISO 13849-1 :2015,	Cat 3, PLd	
ISO/TS 15066: 2016	Robots and robotic devices. Collaborative robots	

2. 認證證書如何顯示驗證內容?
例如: Robots and robotic devices for industrial robots. Robots?
3. 根據標準 [EN ISO 13849-1 :2015](#)(Safety of machinery — Safety- related parts of control systems Part 1: General principles for design) 6.2 Specifications of categories 規定
如何認定 SRP/CS (Safety-related parts control system) [6.2 Specifications of categories](#) ?
 - a. 技術文件審查,文件如何準備,可否提供書寫 Data Sheet 標準 Form?
 - b. 實務現場安裝於 truck 上測試確認?
[Category B](#) / Catagory 1/ Catagory 3/ Catagory 4
 - c. 疫情狀況下如何執行?
 - d. 預計費用與時間
4. UL 網站上列控所有已通過驗證產品,在 SGS 網站上有無如何查詢已認可相關 Robot 的網址?