

CS48 Electrician

Disclaimer

These Occupational Frameworks and Skill Profiles have been developed as workforce planning, occupational mapping and skills reference resources for the Australian textile, clothing and footwear (TCF) industry. They are intended to describe the typical functions, responsibilities, skills and capabilities associated with occupations across the industry.

These documents are not intended to replace or override industrial instruments or employment arrangements, including awards, enterprise agreements, employment contracts, position descriptions, classification structures, licensing or regulatory requirements, or other statutory obligations. Where differences arise, the relevant industrial, legislative or regulatory requirements take precedence. The Skill Profiles should be used as complementary reference documents to support workforce planning, career development, training and skills recognition.

1. Job role

TCF sub-sector	Cross-sector
Job role	CS48 Electrician
Job role description	Installs, maintains and repairs electrical systems and equipment across TCF production and processing environments to ensure safe, reliable and efficient operation. In the TCF industries—where production systems range from garment and footwear manufacturing to textile processing and automated laundry operations—the Electrician supports machinery, control systems, automation and utilities, ensuring compliance with Australian electrical and WHS standards while minimising downtime and supporting continuous production.
Performance expectations	• Maintaining safe and compliant electrical systems across plant and equipment. • Minimising electrical-related downtime and production disruption. • Ensuring reliable operation of machinery, automation and control systems. • Complying with Australian electrical standards and WHS regulations. • Supporting preventive and corrective maintenance programs. • Maintaining accurate service, testing and compliance records. • Supporting integration and operation of automated systems. • Responding rapidly to electrical faults and breakdowns. • Contributing to energy efficiency and system optimisation. • Supporting continuous improvement in plant performance.
Specialisation	Industrial electrical systems, automation and Programmable Logic Controller (PLC) systems, control panels, sensors and instrumentation, and energy systems.
Application in other TCF sectors	• Apparel production supporting electrical systems in cutting, sewing and finishing operations. • Textile manufacturing supporting processing, tufting, knitting and finishing systems.

	• Footwear production supporting assembly, stitching and automated machinery. • Leather goods production supporting cutting, assembly and finishing equipment. • Dry cleaning and laundry services supporting washers, dryers, conveyors and plant systems. • Technical textile and specialty services supporting controlled processing environments. • Manufacturing and processing industries supporting industrial electrical systems and automation.
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2. Key tasks and critical work functions

Key tasks	• Installing and maintaining electrical wiring, systems and equipment. • Diagnosing and repairing electrical faults in machinery and plant. • Testing motors, drives, sensors and control panels. • Performing preventative and corrective electrical maintenance. • Maintaining and troubleshooting PLC and automation systems. • Ensuring compliance with electrical standards and safety procedures. • Maintaining documentation and service records. • Coordinating with maintenance, engineering and production teams.
Critical work functions	• Ensuring safe and compliant electrical operation of plant and equipment. • Preventing electrical hazards and equipment failure. • Maintaining continuous production through reliable systems. • Supporting automation and control system performance. • Managing lockout/tagout and electrical safety procedures. • Reducing downtime through effective fault diagnosis. • Supporting energy efficiency and system optimisation.

3. Technical skills

Electrical fault diagnosis	Using diagnostic tools and methods to identify and resolve electrical faults.
Motor and drive systems	Maintaining motors, variable speed drives and related systems.
Control panels and circuits	Working with control panels, wiring systems and electrical circuits.
PLC systems	Maintaining and troubleshooting programmable logic controllers.
Sensors and instrumentation	Working with sensors, switches and industrial instrumentation systems.
Automation systems	Supporting automated machinery and integrated production systems.
Preventative maintenance	Planning and executing electrical maintenance schedules.
Compliance standards knowledge	Applying Australian electrical codes and WHS requirements.

Energy systems management	Monitoring and optimising electrical energy usage.
Technical documentation	Maintaining accurate service, testing and compliance records.

4. Generic Skills

Problem solving	Diagnosing and resolving complex electrical issues.
Attention to detail	Ensuring precision in electrical work and compliance.
Communication	Coordinating with maintenance, engineering and production teams.
Time management	Prioritising maintenance and repair activities.
Safety awareness	Maintaining safe working practices and procedures.
Adaptability	Working across varied systems and technologies.

5. Emerging skills

Emerging skills	• Using IoT-enabled machine diagnostics and monitoring systems. • Applying predictive maintenance technologies. • Working with advanced PLC programming and integration. • Using real-time energy monitoring and optimisation systems. • Supporting automation and smart factory systems. • Applying sustainable energy and efficiency practices.
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6. VET Qualifications and Skill Sets

Entry-level preparation	UEE30820 Certificate III in Electrotechnology Electrician.
Advanced development	UEE40420 Certificate IV in Electrical - Instrumentation or equivalent.

7. Job progression

Possible job progression	Apprentice Electrician → Electrician → Senior Electrician → Maintenance Supervisor → Engineering Manager.
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8. Classification

Australian Qualifications Framework	AQF Level 3-4 (trade qualified).
Australian Bureau of Statistics (ABS) Skill Levels	Skill Level 3.
Open Source Classification of Occupations for Australia (OSCA)	381233 Industrial electrician.

Skills Insight is a Jobs and Skills Council funded by the Australian Government Department of Employment and Workplace Relations.