

## LIST OF TABELS

<b>Table 2.1:</b> Literature Review of Energy Disaggregation .....	7
<b>Table 2.2</b> Main load types of household appliances.....	11
<b>Table 2.3:</b> (IEEE 519-2022, pg.17) voltage distortion limits.....	17
<b>Table 2.4:</b> Harmonic current emission standard[38].....	17
<b>Table 3.1:</b> EMG 25 specifications.....	24
<b>Table 3.2:</b> MSQ-30 CT specifications .....	25
<b>Table 3.3:</b> Raspberry Pi 3B+ for data processing .....	25
<b>Table 3.4:</b> USB RS-485 specification to communicate sensors and processors .....	26
<b>Table 3.5:</b> Sample data from each appliance tested .....	29
<b>Table 4.1:</b> The load type of the tested appliances .....	30
<b>Table 4.2:</b> Comparison of the cross-validation evaluation of the tested algorithms .	36
<b>Table 4.3:</b> New data identification results.....	38
<b>Table 4.4:</b> Anomalous load testing.....	42
<b>Table 4.5:</b> Test results of semi-supervised method test .....	43