



ComEC

Commercial Energy Controller

McDonald's Test Report





December 18, 2011
Ver 1.0

McDonald's Project

PowerSines and McDonald's Israel signed the contract for deploying the ComEC systems in 160 McDonald's restaurants in Israel. This report exhibits the results of the ComEC pilot installation in two of McDonald's branches. Both these pilots demonstrated consistent savings of about 10.5% and result in McDonald's decision to deploy the ComEC systems in all its branches.

The table below summarizes basic data about each McDonald's pilot installation:

	Ramat HaSharon	Kohav Yair
Location	The restaurant is a standalone branch located on a central street in Tel-Aviv's upper-class suburbs.	The restaurant is a standalone branch located in a town with 12,000 inhabitants in central Israel
Size	130sqm	150sqm
Main Circuit Breaker	160A	160A
Average monthly operating hours	350 hours	380 hours
Average monthly kWh consumption	25,200 kWh	19,800 kWh
		

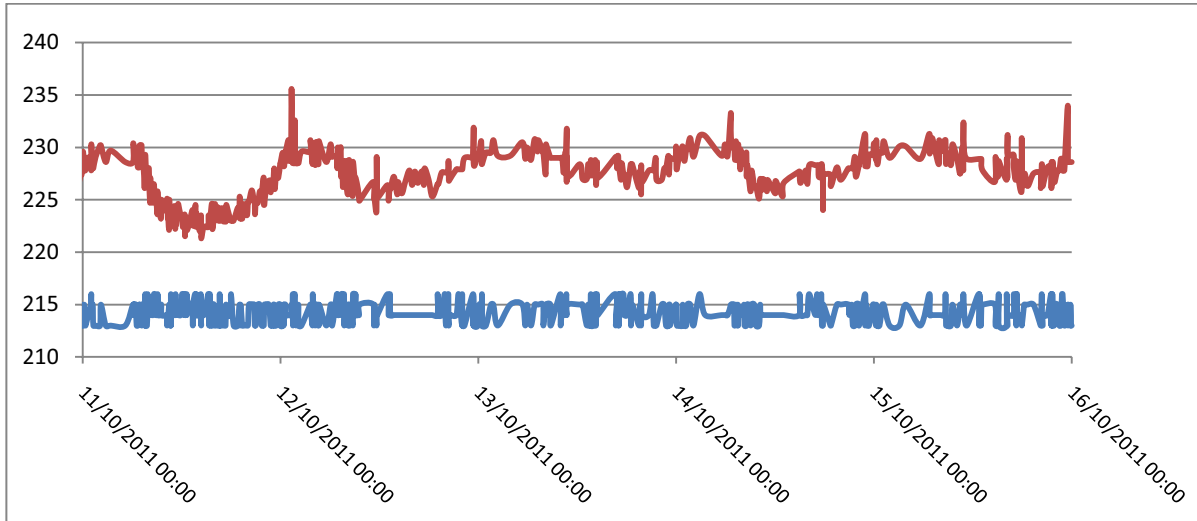
Test Goals:

During the pilot the customer tested the following ComEC parameters:

1. Measurement of energy consumption during identical time periods with external data loggers and meters.
2. Analysing the ComEC results of consumption and energy saving measurements.
3. Ensuring that all equipment in the restaurant continued to operate properly with ComEC installed.

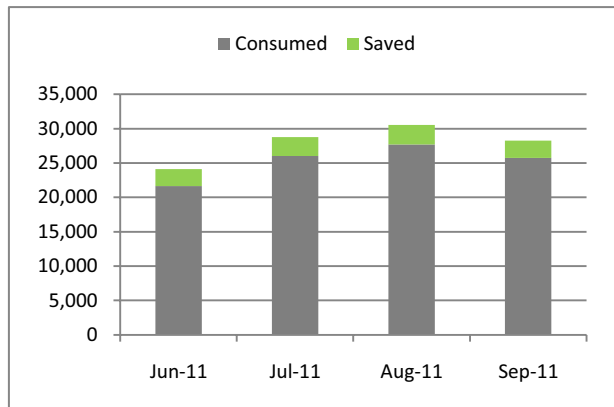
Ramat HaSharon Branch

At the Ramat Hasharon branch, the ComEC 160A system was installed and the pilot covered a period of operation lasting 4 months. The typical input voltage on location was about 225-232V. To maximise savings the output voltage was set to the level of 213V. The cart below depicts ComEC providing a stabilised and regulated output voltage to the entire facility during.



The table and chart below depict the saving and consumption results with ComEC's stabilised voltage output:

Month	Consumed	Saved
Jun-11	21,644	2,452
Jul-11	26,032	2,722
Aug-11	27,697	2,820
Sep-11	25,750	2,520
Saving	10.39%	

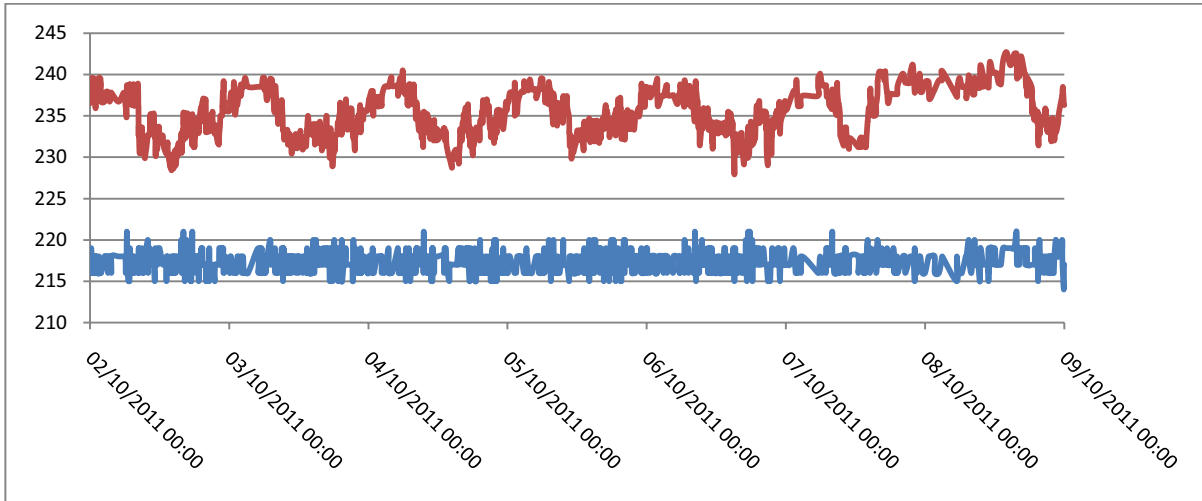


Installation Pictures



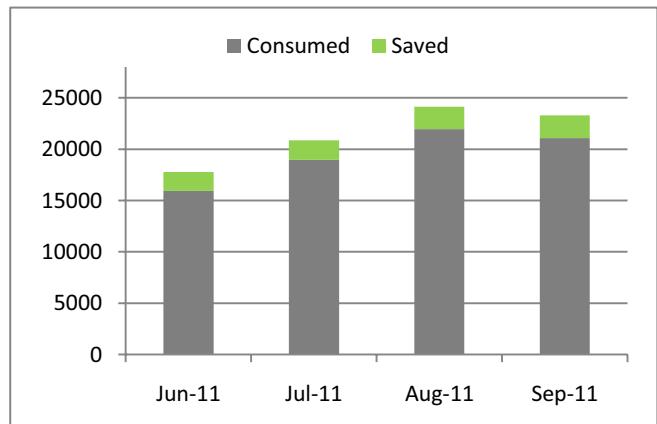
Kohav Yair Branch

At the Kohav Yair branch, the ComEC 160A system was installed and the pilot covered a period of operation lasting 4 months. Typical input voltage on location was about 235-240V. To maximise savings the output voltage was set to the level of 216V. The cart below depicts ComEC providing a stabilised and regulated output voltage to the entire facility.



The table and chart below depict the saving and consumption results with ComEC's stabilised voltage output:

Month	Consumed	Saved
Jun-11	15,946	1,842
Jul-11	18,947	1,922
Aug-11	21,939	2,205
Sep-11	21,073	2,233
Saving	10.53%	



Installation Pictures:





Energy Savings Pilot Conclusions and Results

The ComEC system demonstrated consistent results in electricity saving and improved power quality at both locations. The average saving achieved was over 10%

Both installations were integrated using the Remote Energy Management System (Remote EMS), which enables full monitoring and control of electric parameters, saving figures and electricity allocations through a secure central server. The Remote EMS enables comparison analysis of electricity consumption and detection of anomalies.

This project was approved by the Israeli Industrial Ministry and was awarded with a dedicated financial incentive program for reducing electricity consumption and CO₂.